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ABSTRACT

This report presents findings of the second follow-up in the Baccalaureate and Beyond Study, a longitudinal study which is tracking students who received a bachelor's degree in academic year 1992-93. Major findings indicated that: (1) when they graduated from college, 85 percent of the degree recipients expected to earn an advanced degree; by 1997, 30 percent had actually enrolled, 21 percent had either attained a degree or were still enrolled, and 9 percent had left without a degree; and that (2) overall, 89 percent of the original group were employed in April 1997, 76 percent were working only, another 13 percent were combining school and work, 5 percent were enrolled only, and 6 percent were neither working nor enrolled. Following an executive summary, the main body of the report analyzes findings concerning educational expectations in 1993 and 1997; progression to graduate and first-professional education; and actual participation in graduate and first-professional education. A compendium presents tables showing data on the employment and enrollment status of 1992-93 college graduates. A glossary and technical notes are appended. (DB)

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Statistical Analysis Report June 1999

Baccalaureate and Beyond Longitudinal Study

Life After College: A Descriptive Summary of 1992–93 Bachelor's Degree Recipients in 1997

With an Essay on Participation in Graduate and First-Professional Education

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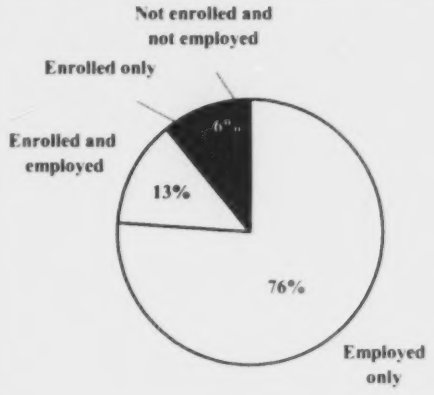
Executive Summary

When followed up in 1997, 1992–93 college graduates as a group were well established in the labor force, with 89 percent employed (figure A). Not all had finished their formal education, however: 18 percent were enrolled for an advanced degree or certificate (13 percent combining school and work, and 5 percent enrolled only). The remaining 6 percent were neither working nor enrolled (with females about twice as likely as males to be in this situation).

Figure A—Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in 1997



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

This report uses data from the Second Follow-up of the Baccalaureate and Beyond Study (B&B:93/97) to describe the enrollment and employment experiences of 1992–93 bachelor's degree recipients. The essay examines a number of aspects of their experiences with graduate and first-professional education. Specific topics include their degree expectations in 1993; changes in their expectations between 1993 and 1997; steps they took to prepare for study at the graduate or first-professional level (taking the necessary examinations, applying for admission, and being accepted); their enrollment; and their progress toward advanced degrees if they did enroll.

A compendium of tables and highlights from the tables following the essay detail aspects of graduates' employment in April 1997 (including how much they are working, their occupations, and their salaries), their experiences with unemployment since they graduated, and various characteristics of their primary jobs in April 1997.

Graduate and First-Professional Education

Educational Expectations

When asked about their educational plans in 1993, a large majority of 1992–93 bachelor's degree recipients (85 percent) reported that they expected to earn a graduate or first-professional degree sometime in the future. By 1997, the percentage with this expectation had declined to 72 percent.

There were some differences by gender and race–ethnicity in terms of the percentages with advanced degree expectations and how expectations changed over time. In 1993, female graduates

were slightly more likely than male graduates to have advanced degree expectations (87 percent versus 83 percent). By 1997, however, the difference had diminished, and they were about equally likely to expect to earn an advanced degree (73 percent of females and 71 percent of males).

In 1997, black and Hispanic graduates were more likely than white graduates to expect to earn an advanced degree (85 percent and 79 percent versus 70 percent, respectively). Advanced degree expectations dropped more for whites (15 percentage points) between 1993 and 1997 than for blacks (4 percentage points).

Undergraduate borrowing did not seem to discourage graduates from considering advanced degrees. In 1993, borrowers and nonborrowers had similar expectations, and in 1997, borrowers were actually more likely than nonborrowers to report advanced degree expectations (74 percent versus 70 percent).

Changes in graduates' advanced degree expectations differed depending on their original degree expectations. The percentage of bachelor's degree recipients who expected to earn a master's degree as their highest degree decreased slightly between 1993 and 1997 (from 58 percent to 54 percent), while the percentage expecting to complete a doctoral degree declined sharply (from 21 percent to 12 percent). The percentage expecting to earn a first-professional degree was similar in both years (about 6 percent).

Progression to Graduate and First-Professional Education

One of the first steps toward admission to an advanced degree program is to take one of the admissions exams, such as the Graduate Record Examination (GRE), Graduate Management Admissions Test (GMAT), Law School Admissions Test (LSAT), or Medical School Admissions Test (MCAT). By 1997, 39 percent of all 1992–93 bachelor's degree recipients had taken a graduate admissions exam and 41 percent had applied for admission to a graduate or first-professional program. Thirty-five percent had been accepted into at least one program, and 30 percent had enrolled.

Students who applied to advanced degree programs had a good chance of being accepted somewhere. Among those who had applied by 1997, 87 percent were accepted into at least one program.

Undergraduate debt may discourage students from continuing their education. Bachelor's degree recipients who had borrowed for their undergraduate education were slightly less likely than nonborrowers to have applied for admission to a graduate or first-professional program (38 percent versus 42 percent). The amount borrowed did not seem to make a difference, however.

Students' performance in college was positively associated with applying, being accepted, and enrolling (table A). Graduates with cumulative grade-point averages (GPAs) of 3.5 or above at their baccalaureate institution were at least twice as likely as those with GPAs under 2.5 to apply, and about three times as likely to enroll.

Among the 50 percent of graduates with GPAs of 3.5 or above who applied for admission to a graduate or first-professional program, 91 percent were accepted. Eighty-three percent of those who were accepted enrolled.

Table A—Percentages of 1992–93 bachelor's degree recipients who took steps toward admission and enrolled: 1993–97

	Graduate admission exams taken	Applied for admission	Accepted	Enrolled
Total	38.8	40.6	35.4	29.8
GPA at bachelor's institution				
Under 2.5	25.6	21.6	16.3	13.5
2.5 to 2.99	34.8	36.1	30.7	25.5
3.0 to 3.49	43.7	46.0	40.2	33.6
3.5 or above	45.6	50.4	45.8	40.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Participation in Graduate and First-Professional Education

Most post-baccalaureate enrollment by 1997 was at the master's level. Of the 30 percent of the 1992–93 bachelor's degree recipients who had enrolled in an advanced degree program by 1997, about three-quarters were pursuing a master's degree (10 percent were seeking an MBA and 66 percent were working on other master's degrees). Another 14 percent were enrolled in a first-professional degree program, and the remaining 10 percent were enrolled in a doctoral program.

Men and women were equally likely to enroll in a graduate or first-professional program, but gender differences in the types of degrees pursued were pronounced. Three-quarters of enrolled women were in a master's degree program other than an MBA, compared with about half (54 percent) of enrolled men. In contrast, men were twice as likely as women to enroll in an MBA program (14 percent versus 6 percent). Men were also more likely than women to enroll in a first-professional program (18 percent versus 10 percent) or doctoral program (13 percent versus 7 percent).

Differences existed by race/ethnicity as well. For example, Asian/Pacific Islander graduates who continued their education were about twice as likely as graduates from other racial/ethnic groups to enroll in a first-professional program (35 percent versus 12–17 percent), and they were less likely to enroll in non-MBA master's degree programs (46 percent versus 66–70 percent).

Overall, 49 percent of 1992–93 graduates who enrolled in a graduate or first-professional program by 1997 did so within a year of earning their bachelor's degree, and another 23 percent enrolled within 2 years. Doctoral students were the most likely to have enrolled within a year of graduation (78 percent did so), followed by first-professional students (55 percent), and then those entering a master's program other than an MBA (46 percent). MBA students were the least likely to enter this soon (29 percent), and one-third of them waited more than 3 years before enrolling.

Education and business were the fields most commonly studied, chosen by 22 and 18 percent, respectively, of the 1992–93 bachelor's degree recipients who had enrolled in an advanced degree

program by 1997. About one-third (31 percent) of students enrolled in a master's program other than an MBA sought a degree in education. At the doctoral level, about one-quarter (24 percent) of students were studying the life and physical sciences (compared with about 5 percent of those pursuing a master's degree).

Enrollment patterns varied markedly with degree program. Among those enrolled in April 1997, 94 percent of those working on a first-professional or doctoral degree were enrolled full time. In contrast, a majority of non-MBA master's students (59 percent) were enrolled part time. About two-thirds of MBA students attended part time. About three-quarters (77 percent) of all MBA students attended classes on weeknights.

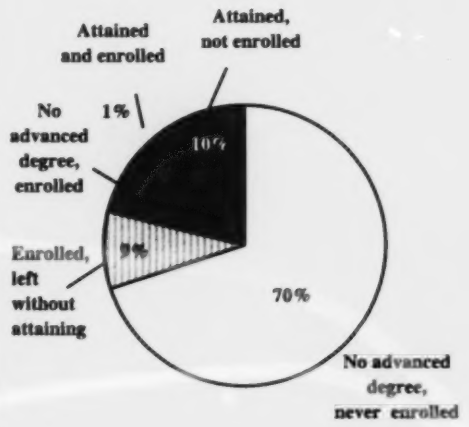
Progress toward an advanced degree reflects the combined effects of enrollment duration, enrollment intensity (full- or part-time), success in the courses taken, and program requirements. Of those who had enrolled for an advanced degree or certificate at any time since earning a bachelor's degree, 71 percent of doctoral students, 56 percent of MBA students, and 32 percent of non-MBA master's students were enrolled when interviewed in 1997. The rest had either completed their degree or left without completing.

Of doctoral students who enrolled within a year of earning their bachelor's degree, 57 percent had not completed their coursework by 1997, and 46 percent had not taken their exams. However, the majority (59 percent) had started on their thesis.

Just over one-half (56 percent) of 1992–93 bachelor's degree recipients who pursued an advanced degree received some type of financial aid to help pay for their education. Fifty-three percent of students in first-professional programs received loans but no grants, compared with 18–25 percent of students in other programs. Doctoral students were the most likely to receive an aid package that included grants and no loans (28 percent versus 5–12 percent of students in other degree programs). MBA seekers were the most likely to receive only employer benefits (18 percent versus no more than 4 percent for students in other degree programs).

As indicated above, 30 percent of 1992–93 graduates had enrolled in a graduate or first-professional program between the time they graduated and when they were interviewed in 1997. At the time of the 1997 interview, 21 percent had persisted—that is, they had either attained a graduate or first-professional degree or were enrolled and working toward a degree (figure B).

Figure B—Percentage distribution of 1992–93 bachelor's degree recipients according to attainment and enrollment status: 1997



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

The other 9 percent had left without a degree. Of the 21 percent who persisted, about half (10 percent) had attained a degree and were no longer enrolled. Another 1 percent had attained one degree and were enrolled for additional education, and the remaining 10 percent were enrolled but had not yet earned an advanced degree.

Persistence was lowest among students who had enrolled for a master's degree other than an MBA (table B). About one-quarter of doctoral students had completed one degree and were still enrolled.

Employment Experiences

Employment Patterns

Among 1992–93 bachelor's degree recipients, 89 percent were employed in April 1997 (81 percent full time and 8 percent part time). An additional 3 percent were unemployed, and the remaining 8 percent were out of the labor force.

There were some gender differences in employment patterns. Men were slightly more likely than women to be employed (91 percent versus 88 percent), and women more likely than men to be working part time (11 percent versus 6 percent).

About three-quarters of the bachelor's degree recipients had held more than one job since graduation. The average number was 2.8.

Occupation Types and Salaries

About one-fifth (21 percent) of the 1992–93 graduates who were employed in April 1997 had jobs in business and management, and 16 percent were working as teachers. Fourteen percent had administrative jobs, and 11 percent had jobs in professional fields other than education, business, health, or engineering.

The overall average annual salary for graduates working full time was $34,252, but average salaries varied considerably by undergraduate major.

Table B—Percentage distribution of 1992–93 bachelor's degree recipients according to graduate or first-professional degree enrollment and attainment when interviewed in 1997, by highest program enrolled

		Attained graduate first-professional degree or currently enrolled			
	No degree, not enrolled[1]	Total	No degree, enrolled	Attained, not enrolled	Attained and enrolled
Total	78.9	21.1	9.5	10.2	1.4
Highest program enrolled					
Master's other than MBA[2]	33.6	66.5	27.3	37.0	2.2
MBA	20.8	79.2	50.5	25.6	3.2
First-professional	21.2	78.8	36.6	38.2	4.1
Doctoral	19.9	80.1	37.5	19.3	23.3

[1]Includes those who enrolled but left before 1997.

[2]Includes post-master's certificate.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Engineering majors, for example, were earning an average of $44,524 in April 1997, while education majors were earning an average of $26,513.

Experience With Unemployment

The unemployment rate in April 1997 (calculated excluding those out of the labor force) was 2.9 percent. As a point of reference, the U.S. unemployment rate for adults 25 years and older was 3.7 percent at that time.

Job Characteristics

Among the 1992–93 bachelor's degree recipients who were working in April 1997, 56 percent reported that their job was closely related to their degree, and 57 percent reported that their job had definite career potential. Five percent had part-time jobs but would have preferred to be working full time.

Most (80 percent) of those employed in April 1997 were very satisfied with their co-workers. Sixty percent were very satisfied with their supervisor, and 56 percent with their working conditions. The proportion reporting that they were very satisfied with their working conditions ranged from 42 percent of those in military/protective service occupations to 66 percent for those in engineering occupations.

Bachelor's degree recipients had found their April 1997 jobs in a variety of different ways, including referrals (35 percent), want ads (22 percent), and employment agencies (8 percent).

Summary

When they graduated from college, 85 percent of 1992–93 bachelor's degree recipients expected to earn an advanced degree. By 1997, 30 percent had actually enrolled. Twenty-one percent had either attained a degree or were still enrolled, and 9 percent had left without a degree.

Overall, 89 percent were employed in April 1997—76 percent were working only, and another 13 percent were combining school and work. Relatively few (5 percent) were enrolled only. The remaining 6 percent were neither working nor enrolled.

Foreword

The Baccalaureate and Beyond Longitudinal Study (B&B:93) tracks students who received a bachelor's degree in academic year 1992–93. Participants were sampled and surveyed in their year of graduation as part of the 1993 National Postsecondary Student Aid Study (NPSAS:93). The base-year study consisted of two components: an institutional survey that provided extensive information on students' enrollment and financial aid and a student survey. The First Follow-up (B&B:93/94) was conducted 1 year later, and provided additional information that is comparable to that collected in the Recent College Graduates (RCG) series of cross-sectional surveys. As part of the First Follow-up, participants' undergraduate transcripts were also collected from the B&B sample institutions. In 1997 (approximately 4 years after graduation), B&B participants were contacted again for the Second Follow-up (B&B:93/97).

While B&B:93/94 provided continuity with earlier cross-sectional surveys, B&B:93/97 highlights the benefits of B&B's longitudinal design. Some issues, such as access to and participation in graduate and first-professional education, require a longer time lag than 1 year after graduation to observe outcomes of interest. Furthermore, the longitudinal design permits a comparison of outcomes at different points in time for bachelor's degree recipients.

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Participation in Graduate and First-Professional Education

Introduction

Graduate and first-professional education provides important benefits for both individuals and society. At the individual level, it can yield both personal and financial rewards by permitting individuals to pursue their intellectual interests in greater depth, providing them with access to careers that require an advanced degree, and increasing their earning potential. At the societal level, graduate and first-professional education supplies the labor market with highly trained professionals in a wide variety of fields. In addition, it is central to supporting and continuing knowledge production in universities and research centers.

When examining participation in graduate and first-professional education, a number of important issues deserve consideration:

- Who enjoys access to further education? Is there evidence of impeded access for some groups? For example, relative to their educational expectations, do certain racial–ethnic groups participate at lower rates than others? Does undergraduate debt deter students from continuing their education?
- What degrees are graduates pursuing, and in what fields?
- What proportion of high-achieving undergraduates pursue further education?
- What is the nature of graduate and first-professional education with respect to timing of enrollment, enrollment intensity, combination of enrollment and work, and financing?
- What proportion of 1992–93 bachelor's degree recipients had completed a graduate or first-professional degree by 1997, and what proportion were working toward a degree?

The analysis uses data from the Baccalaureate and Beyond Study to address these questions. Baccalaureate and Beyond is a longitudinal study of students who received a bachelor's degree in academic year 1992–93.[1] Participants were sampled and surveyed in their year of graduation as part of the 1993 National Postsecondary Student Aid Study (NPSAS:93). They were surveyed again in 1994, approximately one year after graduation (B&B:93/94) and then again in 1997 (B&B:93/97). This report summarizes selected findings from the most recent

[1] The B&B sample is representative of all 1992–93 bachelor's degree recipients, a small number of whom held a previous bachelor's degree.

follow-up to describe bachelor's degree recipients' plans for graduate and first-professional education, changes in those plans over the study period, steps taken toward enrollment, and enrollment in the 4 years after college graduation. In addition, a compendium of tables provides descriptive information on the bachelor's degree recipients' enrollment and employment status in April 1997, with detailed information about their labor market participation.

To place this analysis in context, it is worth briefly describing the characteristics of the 1992–93 bachelor's degree recipients. Just over half (55 percent) were female; 83 percent were white, non-Hispanic, 6 percent were black, 5 percent were Hispanic, 5 percent were Asian/Pacific Islander, and 1 percent were American Indian/Alaskan Native. About half (47 percent) of the graduates were 22 years or younger when they received their degree, and one-quarter were 23–24 years old. About two-thirds (65 percent) earned their degree at a public institution.[2]

Educational Expectations in 1993 and 1997

In the base year (1993) and each of the follow-ups (1994 and 1997), the 1992–93 bachelor's degree recipients were asked to indicate the highest degree they expected to attain in the long run. This section examines how their educational expectations varied with respect to their demographic and undergraduate enrollment characteristics, and how these expectations changed over time. Although data are presented from each of the three surveys, the discussion concentrates on the first and last years (1993 and 1997).

Advanced Degree Expectations in the Aggregate

Aggregate advanced degree expectations are described first—that is, the total percentage of bachelor's degree recipients expecting to complete a graduate or first-professional degree[3] without distinguishing among different types of degrees. Eighty-five percent of bachelor's degree recipients indicated in 1993 that they expected to complete a graduate or first-professional degree. By 1997, this percentage had declined to 72 percent (table 1). When comparing the overall percentage with advanced degree expectations at two points in time, it is important to remember that the change reflects the combined effects of individuals who maintained, reduced, and raised their expectations in the intervening period. In other words, the overall decline observed between 1993 and 1997 includes not only individuals who reduced their expectations, but also others who had the same advanced degree expectations in both years, and still others who had raised their expectations by 1997. These different types of changes are described later.

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[2]A. McCormick and L. Horn, *A Descriptive Summary of 1992–93 Bachelor's Degree Recipients 1 Year Later* (NCES 96-158) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1996), 3, 7.

[3]First-professional degrees are defined as those that qualify an individual to enter into dentistry (DDS or DMD), medicine (MD), optometry (OD), osteopathic medicine (DO), pharmacy (DPharm), podiatric medicine (DPM), veterinary medicine (DVM), chiropractic (DC or DCM), law (JD or LLB), or the clergy (MDiv or MHL).

Table 1—Percentage of 1992–93 bachelor's degree recipients who expected to attain a graduate or first-professional degree when asked in 1993, 1994, and 1997, by selected student and enrollment characteristics

	1993	1994	1997
Total	85.4	82.8	71.9
Gender			
Male	83.4	81.2	70.5
Female	87.1	84.0	73.0
Race–ethnicity			
American Indian/Alaskan Native	88.7	78.5	78.2
Asian/Pacific Islander	88.5	86.9	78.6
Black, non-Hispanic	89.3	92.9	84.7
Hispanic	89.8	84.5	79.0
White, non-Hispanic	84.6	81.7	70.0
Age received bachelor's degree			
22 or younger	88.2	86.2	76.5
23–24	82.7	79.6	69.2
25–29	83.3	81.4	69.4
30 or older	83.1	78.5	64.5
Degree-granting institution (undergraduate)			
Public 4-year			
Nondoctorate-granting	85.7	81.7	69.6
Doctorate-granting	85.8	81.3	71.8
Private, not-for-profit 4-year			
Nondoctorate-granting	87.4	84.3	71.8
Doctorate-granting	89.0	87.1	76.9
Other	53.9	82.6	68.6
Total undergraduate debt*			
Did not borrow	86.0	81.8	70.2
Borrowed, total	87.8	84.0	73.7
Less than $1,000	88.2	88.7	77.0
$1,000–4,999	87.7	83.1	73.6
$5,000–9,999	87.5	83.4	69.6
$10,000–19,999	88.3	85.2	76.6
$20,000 or more	85.7	80.0	75.0

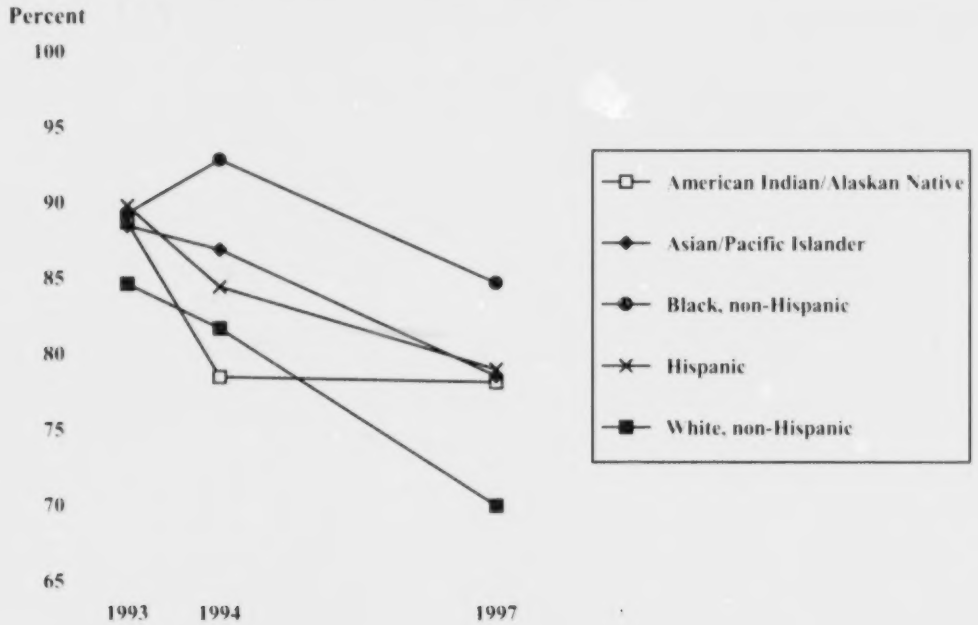
*Federal loan programs only. Because of missing data on borrowing status, the values for borrowers and nonborrowers do not always encompass the totals in the first table row.

NOTE: Graduate/first-professional degree defined as master's degree or higher (excludes post-bachelor's certificate).

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

There was some variation in expectations by gender and race–ethnicity. Female graduates were somewhat more likely than male graduates to report advanced degree expectations in 1993 (87 percent versus 83 percent). In 1997, however, their expectations were similar (73 percent and 71 percent, respectively, expected to earn advanced degrees). In 1997, both black and Hispanic graduates were more likely than white[4] graduates to have advanced degree expectations (85 percent and 79 percent versus 70 percent) (figure 1).[5] Compared to 1993, advanced degree expectations among black graduates dropped by 4 points, while the percentage dropped by 15 percentage points among whites.

Figure 1—Percentage of 1992–93 bachelor's degree recipients who reported that they expected to attain a graduate or first-professional degree, by race–ethnicity: 1993, 1994, and 1997



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Undergraduate borrowing does not appear to discourage graduates from considering advanced degrees. In 1993, there was no evidence of a relationship between individuals' participation in federal loan programs and advanced degree expectations. In 1997, college graduates who

[4]Throughout this report, when the terms "white" and "black" appear alone, they should be assumed to include the qualifier "non-Hispanic."

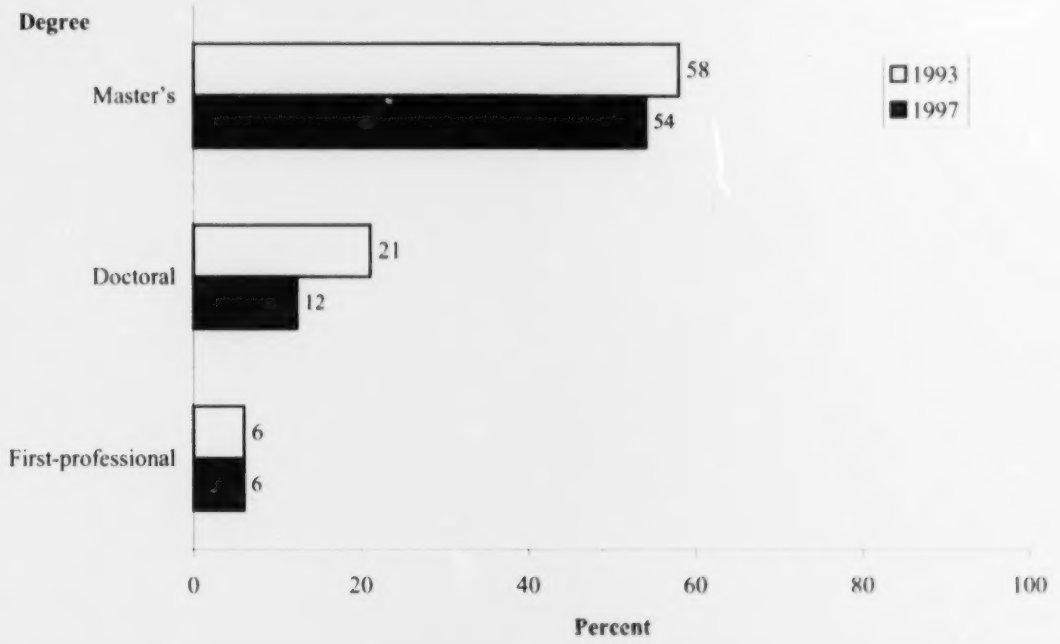
[5]No other differences between the various racial–ethnic groups are statistically significant.

had borrowed were actually more likely than nonborrowers to report advanced degree expectations (74 percent of borrowers versus 70 percent of nonborrowers).

Specific Degree Expectations in 1993 and 1997

When 1992–93 bachelor's degree recipients were asked in 1993 about their educational expectations, 58 percent expected to earn a master's degree, 21 percent a doctoral degree, and 6 percent a first-professional degree (figure 2 and table 2). By 1997, the percentage expecting a master's degree had dropped slightly from 58 percent to 54 percent, and the percentage expecting a doctoral degree had dropped sharply from 21 to 12 percent. The percentage expecting a first-professional degree was about the same in both years.[6]

Figure 2—Percentage of 1992–93 bachelor's degree recipients who expected to attain advanced degrees, by type of degree: 1993 and 1997



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

[6]However, this does not mean there were no changes at the individual level.

Table 2—Percentage of 1992–93 bachelor's degree recipients who expected to attain a master's, first-professional, or doctoral degree, by selected student and enrollment characteristics: 1993 and 1997

	Educational expectations, 1993			Educational expectations, 1997		
	Master's	First-professional	Doctoral	Master's[1]	First-professional	Doctoral
Total	58.0	6.3	21.1	54.1	5.5	12.3
Gender						
Male	54.5	7.3	21.6	51.9	6.5	12.2
Female	61.0	5.5	20.6	55.9	4.6	12.5
Race–ethnicity						
American Indian/Alaskan Native	50.5	6.0	32.2	51.3	4.9	22.0
Asian/Pacific Islander	45.6	12.4	30.5	55.9	12.9	9.8
Black, non-Hispanic	50.2	8.8	30.3	57.7	6.7	20.3
Hispanic	57.3	8.2	24.4	58.5	7.3	13.2
White, non-Hispanic	59.4	5.7	19.5	53.5	4.8	11.7
Age received bachelor's degree						
22 or younger	55.8	8.6	23.8	53.6	8.2	14.7
23–24	57.7	4.7	20.3	55.4	3.8	10.1
25–29	60.2	4.4	18.6	57.1	2.2	10.1
30 or older	63.1	3.8	16.2	51.1	2.7	10.7
Degree-granting institution (undergraduate)						
Public 4-year						
Nondoctorate-granting	63.3	3.9	18.5	55.0	3.1	11.6
Doctorate-granting	57.5	7.2	21.2	54.2	5.8	11.7
Private, not-for-profit 4-year						
Nondoctorate-granting	60.9	5.3	21.2	53.4	4.7	13.6
Doctorate-granting	52.6	10.6	25.9	52.6	9.6	14.7
Other	35.0	0.9	17.9	55.4	4.4	8.8
Total undergraduate debt[2]						
Did not borrow	59.9	6.3	19.8	52.2	5.7	12.3
Borrowed, total	57.5	6.6	23.7	56.6	4.9	12.3
Less than $1,000	68.6	3.8	15.9	63.7	5.7	7.6
$1,000–4,999	60.9	5.6	21.2	56.7	4.8	12.1
$5,000–9,999	59.9	6.2	21.4	54.3	4.4	11.0
$10,000–19,999	52.5	7.7	28.1	58.0	5.4	13.3
$20,000 or more	51.4	7.9	26.4	54.1	4.4	16.6

[1]Includes post-master's certificate (not among the choices in 1993).

[2]Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Doctoral degree expectations declined between 1993 and 1997 for almost every group that appears in table 2. The only possible exceptions are groups with relatively few members in the B&B sample: American Indian/Alaskan Native graduates, graduates of "Other" institutions, and borrowers who graduated with less than $1,000 in debt. For these groups, the percentages appear to have declined, but there is insufficient statistical evidence that the two estimates differ.[7]

In 1993, white graduates were more likely than black or Asian/Pacific Islander graduates to have master's degree expectations in 1993 (59 percent versus 50 and 46 percent, respectively). However, by 1997, these groups held master's degree expectations in similar proportions.

In both 1993 and 1997, Asian/Pacific Islander graduates were more likely than white graduates to expect a first-professional degree (12 percent versus 6 percent in 1993, and 13 percent versus 5 percent in 1997). In addition, black graduates were more likely than white or Asian/Pacific Islander graduates to have doctoral degree expectations in 1997.

Graduates who borrowed through federal loan programs expected to complete a master's degree in comparable proportions to nonborrowers in 1993, but were more likely than nonborrowers to expect to complete a doctorate (24 versus 20 percent). By 1997, 12 percent of each group expected to attain a doctoral degree, and borrowers were somewhat more likely than nonborrowers to expect a master's degree (57 versus 52 percent).

Comparison of Graduates' Degree Expectations in 1993 and 1997

A considerable number of graduates changed their educational expectations—either raising or lowering them—between 1993 and 1997 (table 3). Expectations were most stable among those who initially did not plan to continue their education or who expected to complete a master's degree, while those who expected a first-professional or doctoral degree in 1993 were more likely to express a different expectation in 1997.

Among college graduates who said in 1993 that they did not expect to pursue an advanced degree, 63 percent expressed the same expectation in 1997, as did 67 percent of graduates who reported master's degree expectations in 1993 (table 3).[8] Among those who expected a first-professional degree in 1993, 40 percent had the same expectation in 1997, and among graduates who had doctoral degree expectations in 1993, 36 percent held the same expectations in 1997.

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[7]When a group is represented by a small number of individuals in the sample, the uncertainty associated with the estimates increases (that is, the standard errors associated with the estimates are relatively large). See appendix B.

[8]About 2 and a half percent expected some further education short of an advanced degree (choices that were not present in the 1993 survey instrument).

There was no systematic relationship between undergraduate debt and changes in educational expectations between 1993 and 1997.

Table 3—Percentage distribution of 1992–93 bachelor's degree recipients according to highest degree expected when asked in 1997, by 1993 expectations and undergraduate borrowing in federal loan programs

	Bachelor's	Master's[1]	First-professional	Doctoral	All others[2]
			Total		
Total	25.7	54.1	5.5	12.3	2.4
Educational expectations, 1993[3]					
Bachelor's	63.1	29.3	2.2	2.9	2.6
Master's or higher	18.4	58.7	6.1	14.3	2.5
Master's	22.6	67.5	1.9	5.8	2.4
First-professional	7.6	27.9	39.7	19.0	5.7
Doctoral	10.4	43.6	7.8	36.5	1.7
			Did not borrow		
Total	27.3	52.2	5.7	12.3	2.5
Educational expectations, 1993					
Bachelor's	71.0	24.7	1.0	0.8	2.5
Master's or higher	19.3	56.9	6.6	14.7	2.6
Master's	23.4	65.4	1.9	6.7	2.5
First-professional	5.9	26.2	41.6	20.9	5.4
Doctoral	10.9	40.8	9.5	37.0	1.9
			Borrowed		
Total	23.9	56.6	4.9	12.3	2.4
Educational expectations, 1993					
Bachelor's	66.4	28.0	0.6	2.0	3.1
Master's or higher	17.2	61.1	5.5	13.9	2.3
Master's	21.1	70.5	1.7	4.5	2.2
First-professional	9.9	30.1	37.3	16.5	6.2
Doctoral	9.8	46.8	6.0	36.0	1.5

[1]Includes post-master's certificate.

[2]Post-baccalaureate certificate and other.

[3]Because of missing data on educational expectations in 1993, the values for bachelor's and master's or higher do not always encompass the totals in the first table row.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Progression to Graduate and First-Professional Education

The previous section showed that 1992–93 bachelor's degree recipients expected to participate in graduate or first-professional education in large numbers. This section describes the steps that they had taken by 1997 toward participation, including taking entrance examinations, applying, being accepted, and enrolling.

Entrance Examinations

One of the first concrete steps graduates can take toward enrollment is to take required entrance examinations. Table 4 shows the percentages of the 1992–93 bachelor's degree recipients who had taken certain of these examinations by 1997: the Graduate Record Examination (GRE), which is required by many master's and doctoral programs in the arts and sciences as well as certain professional fields; the Graduate Management Admissions Test (GMAT), which is required by many graduate schools of business; the Law School Admissions Test (LSAT); the Medical College Admission Test (MCAT); the Miller Analogies Test, which some graduate programs accept as an alternative to the GRE; and certain other examinations that were taken by a small percentage of graduates (dentistry, nursing, veterinary medicine). The GRE has two forms: a general test, and an advanced or subject area test. Graduates who took either or both tests are reported together in table 4. Other than the two forms of the GRE, some took more than one graduate admissions exam. Those who took two exams, one of which was the GRE, are categorized with GRE takers. The final column in table 4 includes the remaining graduates who took more than one non-GRE exam and graduates who took examinations other than those listed.

Thirty-nine percent of graduates had taken at least one of these entrance examinations by 1997 (table 4). This group was roughly evenly split between those who took the GRE (or the GRE and another exam) and those who took other exams. Female graduates were slightly more likely than male graduates to have taken the GRE, while proportionately more males took tests for admission to business, law, or medical school.

Asian/Pacific Islander graduates were more likely than Hispanic or white graduates to have taken entrance examinations (53 percent versus 38 percent each), but there is insufficient statistical evidence of other differences in test-taking by race–ethnicity. Comparable proportions of graduates from each racial–ethnic group took the GRE (about one out of five graduates).

Bachelor's degree recipients who said in 1993 that they did not expect to complete an advanced degree were less likely than graduates with higher degree expectations at that time to have taken any entrance examinations by 1997. Nonetheless, about one out of five such

Table 4—Percentage distribution of 1992–93 bachelor's degree recipients according to graduate or first-professional admission exams taken, by selected student and enrollment characteristics: 1993–97

	Did not take exams	Took exams					
		Total	GRE[1]	GMAT	LSAT	MCAT	All others[2]
Total	61.2	38.8	21.8	7.1	3.8	2.0	4.1
Gender							
Male	60.0	40.0	20.0	9.6	4.5	2.9	3.0
Female	62.2	37.8	23.3	5.1	3.2	1.2	5.0
Race–ethnicity							
American Indian Alaskan Native	65.6	34.4	21.6	5.4	3.6	0	3.8
Asian Pacific Islander	46.7	53.3	22.3	16.4	4.4	5.6	4.6
Black, non-Hispanic	57.0	43.0	19.3	10.6	5.9	2.1	5.2
Hispanic	62.2	37.9	21.5	5.5	5.4	2.4	3.1
White, non-Hispanic	62.3	37.7	21.9	6.4	3.5	1.7	4.1
Age received bachelor's degree							
22 or younger	51.8	48.2	28.3	8.1	5.3	2.9	3.7
23–24	66.8	33.2	18.7	7.0	2.8	1.8	3.0
25–29	71.4	28.6	15.5	6.4	2.1	1.1	3.4
30 or older	71.7	28.3	13.1	5.1	2.1	0.3	7.7
Educational expectations, 1993							
Bachelor's or less	81.0	19.0	11.4	3.2	1.7	0.5	2.3
Master's	66.6	33.5	17.7	9.5	1.7	0.5	4.1
First-professional	23.9	76.1	23.2	3.2	27.6	14.6	7.6
Doctoral	40.5	59.5	41.5	5.6	4.4	3.3	4.7
Degree-granting institution (undergraduate)							
Public 4-year							
Nondoctorate-granting	68.4	31.6	18.2	6.0	2.6	0.8	4.0
Doctorate-granting	59.3	40.7	23.7	7.1	3.9	2.0	4.0
Private, not-for-profit 4-year							
Nondoctorate-granting	62.2	37.8	21.8	5.9	3.6	1.6	4.9
Doctorate-granting	53.3	46.7	23.3	9.1	5.8	4.6	3.8
Other	61.6	38.4	17.1	14.2	3.4	1.1	2.6
Total undergraduate debt[3]							
Did not borrow	60.4	39.6	23.0	7.2	3.5	2.1	3.8
Borrowed, total	63.3	36.7	19.7	6.8	4.0	1.7	4.6
Less than $1,000	70.6	29.4	15.5	6.4	3.7	1.8	2.0
$1,000–4,999	63.0	37.1	19.4	7.6	3.8	1.9	4.4
$5,000–9,999	64.3	35.8	19.8	6.7	3.2	1.2	4.9
$10,000–19,999	61.8	38.2	20.4	6.9	5.0	1.8	4.1
$20,000 or more	65.1	34.9	19.1	2.4	2.4	1.5	9.6

[1]Includes students who took more than one exam including the GRE.

[2]Includes students who took exams not listed and students who took more than one exam that did not include the GRE.

[3]Federal loan programs only.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

graduates did so. About three-quarters of graduates who expected to complete a first-professional degree had taken an entrance exam by 1997, more than those with other degree expectations. Those with 1993 expectations of a doctoral degree were next most likely to have taken entrance exams (60 percent), followed by those who said they expected to complete a master's degree (34 percent).

Even though they had greater expectations about earning an advanced degree in 1997, bachelor's degree recipients who had borrowed through federal student loan programs as undergraduates were somewhat less likely than nonborrowers to have taken any entrance examinations by 1997 (37 percent versus 40 percent). Among borrowers, there is no evidence that those with higher levels of debt were any more or less likely than those with smaller amounts of debt to take exams.

Applications, Acceptances, and Enrollment

After entrance examinations, the next stages of access to postgraduate study are applications, admission, and enrollment. Table 5 presents the percentages of all 1992–93 graduates who took admission exams, applied for admission, were accepted, and enrolled. The base for calculating the percentages shown in this table is all bachelor's degree recipients; thus, the percentage enrolled shown in table 5 represents the percentage of all graduates who enrolled. Table 6 presents conditional percentages for applicants who were accepted and for acceptees who enrolled. The base for calculating the percentage enrolled is the number accepted; because the percentage enrolled shown in table 6 represents the percentage of those admitted who enrolled, it is much higher than the percentage of all students who enrolled. While the last column in each table reports the percentage who enrolled for a master's or higher level degree, the percentages for applications and acceptances are based on respondents' answers to questions about their applications to graduate or first-professional school, and thus rely on their own definition of the term.[9]

As previously indicated, 39 percent of 1992–93 college graduates took graduate entrance examinations. A comparable percentage (41 percent) applied for admission. Thirty-five percent were accepted by at least one institution, and 30 percent enrolled in a graduate or first-professional program (table 5). Eighty-seven percent of applicants were accepted, and 76 percent of those who gained admission enrolled (table 6).

[9]About 2 percent of B&B participants said they had applied to graduate or first-professional school, but they appear to have applied to programs other than those leading to a master's, first-professional, or doctoral degree.

Table 5—Percentages of 1992–93 bachelor's degree recipients who took graduate or first-professional admission exams, applied for admission, gained admission, and enrolled, by selected student and enrollment characteristics: 1993–97

	Graduate admission exams taken	Applied for admission	Accepted	Enrolled
Total	38.8	40.6	35.4	29.8
Gender				
Male	40.0	40.6	35.5	29.8
Female	37.8	40.6	35.3	29.8
Race/ethnicity				
American Indian/Alaskan Native	34.4	35.4	26.1	20.8
Asian/Pacific Islander	53.3	48.7	44.1	31.0
Black, non-Hispanic	43.0	50.1	37.7	31.6
Hispanic	37.9	41.2	36.2	32.5
White, non-Hispanic	37.7	39.4	34.7	29.5
Age received bachelor's degree				
22 or younger	48.2	48.5	42.6	36.8
23–24	33.2	33.7	29.1	22.6
25–29	28.6	30.5	25.5	21.8
30 or older	28.3	36.2	31.5	26.5
Educational expectations, 1993				
Bachelor's	19.0	16.9	15.5	11.9
Master's	33.5	34.7	29.7	24.2
First-professional	76.1	73.9	63.9	60.4
Doctoral	59.5	66.9	58.9	51.0
Degree-granting institution (undergraduate)				
Public 4-year				
Nondoctorate-granting	31.6	36.2	30.8	25.1
Doctorate-granting	40.7	40.3	35.2	30.3
Private, not-for-profit 4-year				
Nondoctorate-granting	37.8	40.4	35.0	29.8
Doctorate-granting	46.7	49.7	43.3	37.6
Other	38.4	39.5	39.1	25.0
GPA at bachelor's institution				
Under 2.5	25.6	21.6	16.3	13.5
2.5 to 2.99	34.8	36.1	30.7	25.5
3.0 to 3.49	43.7	46.0	40.2	33.6
3.5 or above	45.6	50.4	45.8	40.8

Table 5—Percentages of 1992–93 bachelor's degree recipients who took graduate or first-professional admission exams, applied for admission, gained admission, and enrolled, by selected student and enrollment characteristics: 1993–97—Continued

	Graduate admission exams taken	Applied for admission	Accepted	Enrolled
Baccalaureate degree major				
Professional fields	33.0	34.5	29.9	25.8
Business and Management	30.5	25.0	19.8	16.3
Education	28.7	44.8	41.0	38.0
Engineering	39.2	41.5	39.2	33.9
Health professions	44.5	36.4	29.9	26.6
Public affairs social services	29.5	41.3	37.1	26.4
Arts and sciences	49.5	52.5	46.0	38.5
Biological sciences	69.2	71.1	61.7	52.1
Mathematics and other sciences	48.1	48.3	43.9	39.2
Social science	54.3	51.6	44.6	35.9
History	52.6	62.3	55.8	40.8
Humanities	34.8	42.8	38.4	31.7
Psychology	49.5	56.6	46.6	42.0
Other	34.7	35.2	30.4	24.0
Total undergraduate debt*				
Did not borrow	39.6	41.9	36.4	30.8
Borrowed, total	36.7	38.0	32.8	27.6
Less than $1,000	29.4	35.3	30.7	25.4
$1,000–4,999	37.1	35.6	30.4	25.7
$5,000–9,999	35.8	37.1	30.9	27.4
$10,000–19,999	38.2	40.4	35.7	28.9
$20,000 or more	34.9	42.7	40.2	33.1

*Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93-97), Data Analysis System.

Table 6—Percentages of 1992–93 bachelor's degree recipients who applied for admission to a graduate or first-professional program, were accepted if admitted, and enrolled if accepted, by selected student and enrollment characteristics: 1993–97

	Applied for admission	Accepted if applied	Enrolled if accepted[1]
Total	40.6	87.0	76.3
Gender			
Male	40.6	87.3	76.5
Female	40.6	86.8	76.1
Race–ethnicity			
American Indian/Alaskan Native	35.4	—	—
Asian/Pacific Islander	48.7	90.5	64.0
Black, non-Hispanic	50.1	75.2	72.7
Hispanic	41.2	87.8	82.4
White, non-Hispanic	39.4	88.1	77.1
Age received bachelor's degree			
22 or younger	48.5	87.9	80.0
23–24	33.7	86.5	69.8
25–29	30.5	83.6	73.9
30 or older	36.2	86.8	72.7
Educational expectations, 1993			
Bachelor's	16.9	91.8	67.4
Master's	34.7	85.5	71.9
First-professional	73.9	86.5	88.4
Doctoral	66.9	88.0	80.5
Degree-granting institution (undergraduate)			
Public 4-year			
Nondoctorate-granting	36.2	85.2	71.4
Doctorate-granting	40.3	87.2	79.0
Private, not-for-profit 4-year			
Nondoctorate-granting	40.4	86.6	76.2
Doctorate-granting	49.7	87.1	80.0
Other	39.5	99.0	57.1
GPA at bachelor's institution			
Under 2.5	21.6	75.7	66.1
2.5 to 2.99	36.1	85.1	74.9
3.0 to 3.49	46.0	87.5	75.4
3.5 or above	50.4	90.9	82.6

Table 6—Percentages of 1992–93 bachelor's degree recipients who applied for admission to a graduate or first-professional program, were accepted if admitted, and enrolled if accepted, by selected student and enrollment characteristics: 1993–97—Continued

	Applied for admission	Accepted if applied	Enrolled if accepted[1]
Baccalaureate degree major			
Professional fields	34.5	86.6	76.6
Business and Management	25.0	79.2	71.9
Education	44.8	91.6	80.9
Engineering	41.5	94.6	79.7
Health professions	36.4	82.1	77.2
Public affairs/social services	41.3	89.9	67.8
Arts and sciences	52.5	87.6	77.7
Biological sciences	71.1	86.8	77.4
Mathematics and other sciences	48.3	90.9	83.1
Social science	51.6	86.4	76.4
History	62.3	89.6	69.4
Humanities	42.8	89.8	76.5
Psychology	56.6	82.3	80.5
Other	35.2	86.5	70.3
GRE score summary[2]			
Top 25 percent, 3 sections	86.4	93.7	86.5
Top 25 percent, 2 sections	84.7	91.5	79.6
Top 25 percent, 1 section	81.9	88.4	86.0
Middle 50 percent, 3 sections	81.0	85.0	83.2
All others	82.8	84.8	80.5
Total undergraduate debt[3]			
Did not borrow	41.9	86.9	76.6
Borrowed, total	38.0	86.3	76.0
Less than $1,000	35.3	87.0	81.0
$1,000–4,999	35.6	85.4	75.2
$5,000–9,999	37.1	83.3	78.0
$10,000–19,999	40.4	88.2	74.2
$20,000 or more	42.7	94.1	79.4

—Too few cases for a reliable estimate.

[1]Table 5 showed that 29.8 percent of 1992–93 bachelor's degree recipients enrolled in a graduate or first-professional program by 1997. Because some enroll without formal application, a smaller percentage appear to have enrolled when the percent enrolled is conditioned on applying and being accepted, as it is in this table.

[2]Summarizes student's quartile rank on the composite score of all three GRE general exam subtest scores (verbal, quantitative, and analytic). Because not all graduates took the GRE, the values for the subcategories of this variable do not always encompass the totals in the first table row.

[3]Federal loan programs only. Because of missing data on borrowing status, the values for borrowers and nonborrowers do not always encompass the totals in the first table row.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Individual Characteristics

Gender differences were not evident in aggregate data. Women and men applied to advanced degree programs, gained admission, and enrolled at the same rates (41, 35, and 30 percent, respectively) (table 5).

However, there was some variation by race–ethnicity and age and by educational expectations. Asian/Pacific Islander bachelor's degree recipients were more likely than their white counterparts to apply to graduate or first-professional school (49 percent versus 39 percent). Among those who applied for admission, black candidates were admitted at a lower rate than Asian/Pacific Islanders, Hispanics, or whites (75 percent of blacks were admitted versus 88–90 percent of candidates from the other groups) (table 6). Although the estimates in tables 5 and 6 appear to indicate other differences in applications, acceptances, and enrollment by race–ethnicity, there is insufficient statistical evidence of other systematic differences.[10]

Bachelor's degree recipients who graduated by age 22 were more likely than older graduates to have applied to graduate or first-professional school, and this difference is reflected in the percentages who were accepted and who enrolled. About half (48 percent) of those who graduated by age 22 applied, 43 percent were accepted, and 37 percent enrolled (table 5). Among applicants, there is no evidence that acceptance rates differed by age at graduation.

As might be expected, the rate of application to graduate or first-professional school was related to educational expectations at graduation. Graduates who expected to complete a doctoral or first-professional degree were the most likely to have applied (67 and 74 percent, respectively, versus 35 percent of those who expected a master's degree and 17 percent of those who in 1993 had not expected to earn an advanced degree). Among those who applied and were accepted, individuals who had expected to complete a first-professional or doctoral degree were more likely to enroll than those who had lower expectations.

Institutional Origins and Undergraduate Debt

Graduates of private, not-for-profit doctorate-granting institutions were more likely than those from other institutions to have applied to graduate or first-professional school.[11] Thirty-eight percent of graduates from these institutions had enrolled in a graduate or first-professional program by 1997, compared with 25–30 percent of graduates from other institutions (table 5). Among applicants, the likelihood of being accepted by at least one institution did not differ with respect to the type of institution in which the graduates had earned their bachelor's degree.

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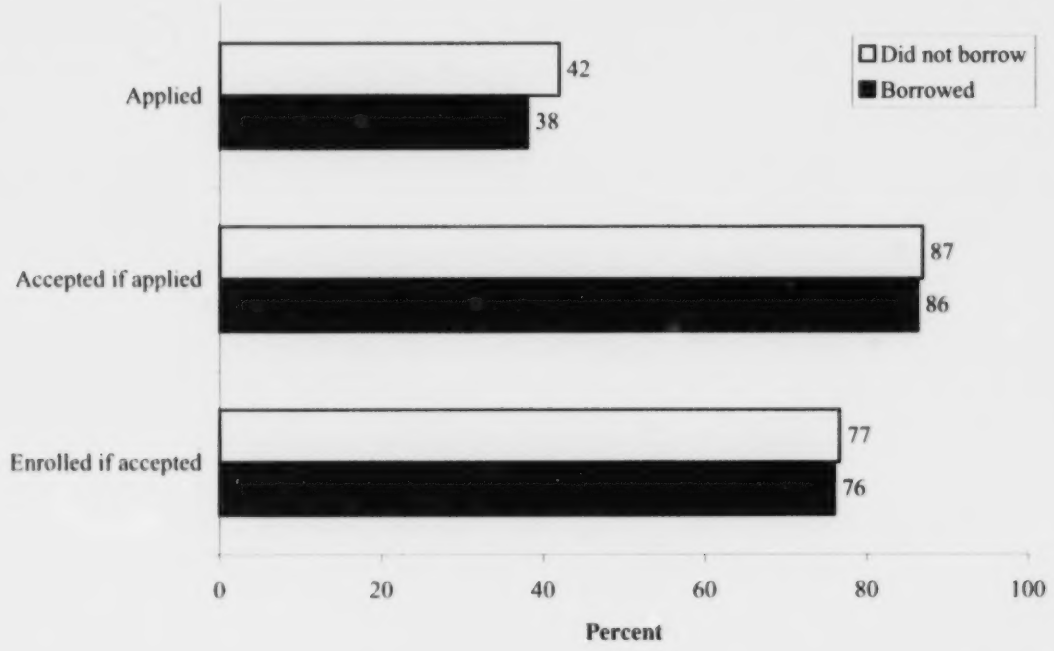
[10] That is, the standard errors are relatively large, indicating a large margin of error associated with the estimates. See appendix B.

[11] This comparison excludes students in the "Other" category.

Borrowing may discourage graduates from applying for admission to advanced degree programs. Bachelor's degree recipients who borrowed through federal loan programs were slightly less likely than nonborrowers to have applied for admission, and this difference is reflected in the percentage who were accepted and who enrolled, as well. For example, 38 percent of those who borrowed applied to graduate or first-professional school and 28 percent enrolled, while 42 percent of nonborrowers applied and 31 percent enrolled (table 5). Among borrowers, however, there is no evidence that level of debt was related to this likelihood of applying, being accepted, or enrolling. Of bachelor's degree recipients who applied, borrowers and nonborrowers were accepted at comparable rates (figure 3 and table 6). Similarly, of those who were accepted, borrowers were as likely to enroll as graduates who had not borrowed.

Figure 3—Percentages of 1992–93 bachelor's degree recipients who applied for admission to graduate or first-professional programs, were accepted if applied, and enrolled if accepted, by undergraduate borrowing status: 1993–97



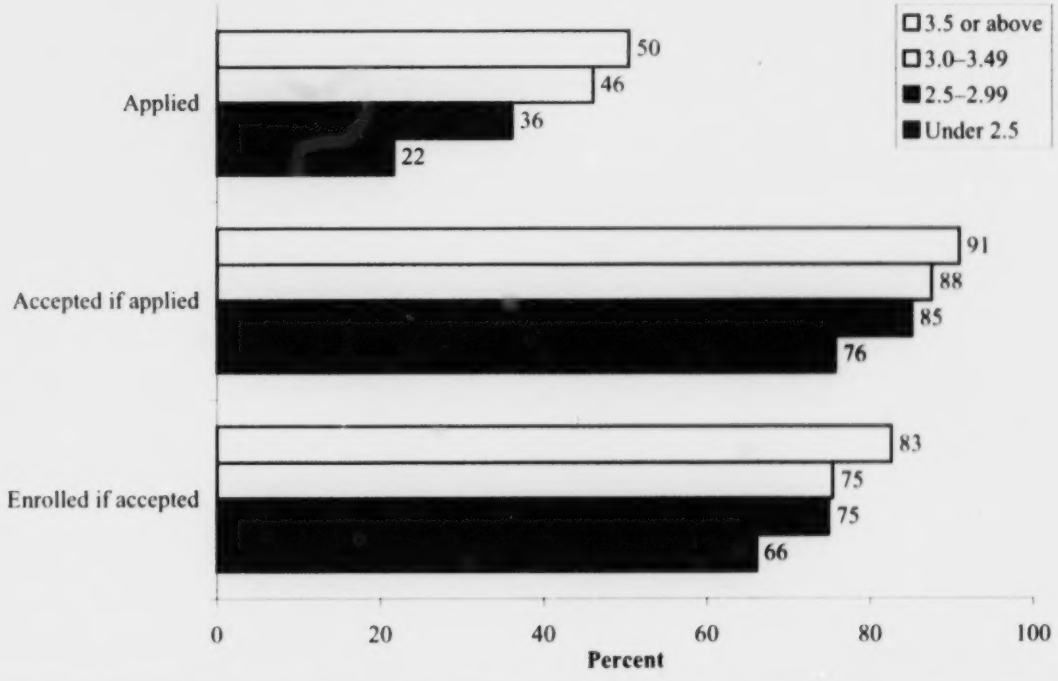
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Grades, Test Scores, and Undergraduate Major

Graduates' cumulative grade-point average (GPA) at their baccalaureate institution was positively related to each stage of access to further education: entrance examinations, applications, acceptances, and enrollment. For example, 46 percent of graduates with GPAs of 3.5 or higher took entrance examinations, half applied, 46 percent were accepted, and 41 percent enrolled (table 5). For those with undergraduate GPAs below 2.5, the percentages were 26, 22, 16, and 14 percent, respectively.

Among graduates who applied for admission, those with higher grades were considerably more likely to be admitted (91 percent of those with GPAs of 3.5 or higher versus 76 percent of those with GPAs below 2.5) (figure 4 and table 6). Of admitted candidates, those with higher undergraduate GPAs were more likely to enroll (83 percent of those with high grades versus 66 percent of those with low grades).

Figure 4—Percentages of 1992–93 bachelor's degree recipients who applied for admission to graduate or first-professional programs, were accepted if applied, and enrolled if accepted, by undergraduate GPA: 1993–97



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table 6 also relates applications, acceptances, and enrollment to performance on the GRE general test (which was taken by a subset of individuals who applied to graduate or first-professional school). Individuals who take this test receive scores on three subtests: a verbal ability test, a quantitative ability test, and a test of analytical reasoning skills. For each test year, the 1992–93 bachelor's degree recipients were assigned a quartile rank for each subtest relative to that of all GRE examinees in that year. Quartile ranks on each of the three subtests were then combined to characterize their overall performance. The "GRE score summary" variable in table 6 places each of the examinees into one of five subgroups based on their overall performance: individuals who scored in the top quartile on all three sections, on two sections, or on one section; individuals who scored in the middle quartiles on all three sections; and all others (that is, individuals who did not score in the top quartile on any section and who scored in the bottom quartile on at least one section).

The likelihood that an individual would apply for admission was not related to performance on the GRE, but the likelihood of admission was.[12] For example, 94 percent of those who scored in the top quartile on all three sections were admitted, compared with 85 percent of those who did not score in the top quartile on any section (table 6). Among those accepted, however, the likelihood of enrollment was unrelated to performance on the GRE.

There was a wide range in application, admission, and enrollment rates among bachelor's degree recipients depending on their undergraduate major. For example, 71 percent of those with a major in the biological sciences had applied for a graduate or first-professional program by 1997, 62 percent had been accepted, and 52 percent had enrolled (table 5). In contrast, 25 percent of those who had majored in business had applied, 20 percent had been accepted, and 16 percent had enrolled.

Participation in Graduate and First-Professional Education

This section focuses on the 1992–93 bachelor's degree recipients who had enrolled in graduate or first-professional education between the time they graduated and the 1997 interview, examining the characteristics of their enrollment in detail. It also provides an overview of students' attainment of advanced degrees as of that time.

Characteristics of Graduate and First-Professional Enrollment

Thirty percent of 1992–93 bachelor's degree recipients had enrolled in graduate or first-professional school by 1997 (table 5). This section presents a detailed analysis of the nature of

[12]Some students may initiate the application process before taking entrance examinations.

this participation, including degree programs, timing of entry, types of institutions attended, fields of study, employment status, time of attendance, status with respect to program requirements, and financial aid.

Degree Program

Among bachelor's degree recipients enrolled in an advanced degree program by 1997, 66 percent were pursuing a master's degree other than a Master's of Business Administration (MBA), and another 10 percent were seeking an MBA (table 7). Fourteen percent were enrolled in a first-professional degree program, and the remaining 10 percent in a doctoral program.

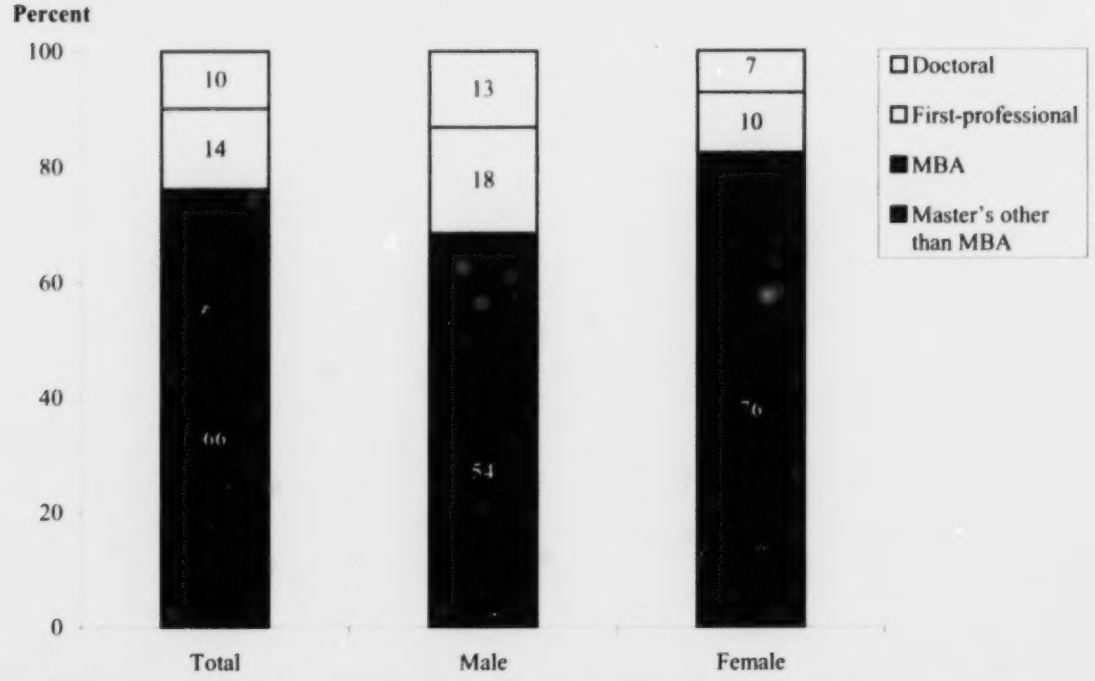
Although women and men were equally likely to enroll in a graduate/first-professional program, there were gender differences in the types of degrees pursued. Three-quarters (76 percent) of women enrolled for a master's degree other than an MBA, compared with about half (54 percent) of men (figure 5). On the other hand, men were twice as likely as women to enroll for an MBA (14 percent versus 6 percent). Men were also more likely than women to enroll in a first-professional or doctoral program.

Asian/Pacific Islander graduates who continued their education were twice as likely as graduates from other racial–ethnic groups to enroll in a first-professional degree program (35 percent versus 12–17 percent of other groups for whom a reliable estimate could be computed). Hispanic, black, and white graduates, on the other hand, were much more likely than Asian/Pacific Islanders to enroll for a master's degree other than an MBA (66–70 percent versus 46 percent of Asian/Pacific Islanders).

Considering the age of the bachelor's degree recipients who enrolled in a graduate or first-professional degree program by 1997, those who received a bachelor's degree by age 22 were the most likely to have enrolled for a first-professional degree (18 percent did so, compared with 5–12 percent of older graduates). In addition, those who graduated at age 23 or 24 were more likely than older students to pursue a first-professional degree. Those who graduated after age 24, by contrast, enrolled for a master's degree (other than the MBA) in proportionately greater numbers than younger graduates (78–81 percent versus 61–67 percent of those who graduated by age 24). There was no relationship between age at graduation and MBA program enrollment.

Graduate/first-professional program enrollment was generally consistent with the educational expectations that students expressed in 1993, but there was considerable variation between specific initial expectations and actual enrollment. This is not surprising in view of the changes

Figure 5—Percentage distribution of 1992–93 bachelor's degree recipients who enrolled for an advanced degree according to the degree program, by gender: 1993–97



NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

in expectations already discussed. With the exception of those expecting a first-professional degree, a majority of those who enrolled ended up in a master's degree program other than an MBA regardless of their initial expectations. Among those who initially expected to complete a first-professional degree and who continued their education, 55 percent actually enrolled for a first-professional degree. About half of students who initially expected a doctorate had enrolled for an advanced degree by 1997 (table 5). Of this group, about one in five had enrolled in a doctoral program, and 62 percent had enrolled in a master's program other than an MBA (table 7).[13]

[13]The 62 percent who enrolled for a master's degree other than an MBA may include students who intend to complete a doctorate eventually, even if they identified their present degree program as a master's.

Table 7—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to degree program,[1] by selected student and enrollment characteristics

	Master's other than MBA[2]	MBA	First-professional	Doctoral
Total	66.2	9.9	14.0	9.9
Gender				
Male	54.4	14.1	18.4	13.1
Female	76.0	6.5	10.4	7.2
Race–ethnicity				
American Indian/Alaskan Native	—	—	—	—
Asian/Pacific Islander	46.3	11.3	35.0	7.5
Black, non-Hispanic	70.1	11.0	11.5	7.4
Hispanic	65.9	8.4	16.7	9.0
White, non-Hispanic	67.1	9.8	12.8	10.2
Age received bachelor's degree				
22 or younger	60.5	9.6	18.2	11.8
23–24	66.7	10.0	12.0	11.3
25–29	77.7	11.0	5.5	5.8
30 or older	80.5	10.0	5.9	3.6
Educational expectations, 1993				
Bachelor's	74.3	9.3	11.4	5.1
Master's	79.0	15.2	4.5	1.3
First-professional	27.1	4.8	55.4	12.7
Doctoral	61.5	4.9	12.2	21.4
Degree-granting institution (undergraduate)				
Public 4-year				
Nondoctorate-granting	80.0	8.1	6.9	5.1
Doctorate-granting	61.9	10.7	15.3	12.1
Private, not-for-profit 4-year				
Nondoctorate-granting	67.0	11.6	13.2	8.2
Doctorate-granting	57.7	9.7	20.2	12.4
Other	81.8	1.7	11.8	4.7
Baccalaureate degree major				
Professional fields	74.5	14.0	6.9	4.6
Business and management	54.0	35.8	9.1	1.0
Education	89.2	2.0	4.5	4.3
Engineering	67.1	16.5	4.2	12.3
Health professions	79.6	3.7	10.7	6.0
Public affairs/social services	84.8	6.4	8.9	0.0
Arts and science	56.8	6.6	20.3	16.4
Biological sciences	28.8	1.5	38.8	30.9
Mathematics and other sciences	55.5	6.3	12.6	25.7
Social science	51.5	14.5	23.4	10.6
History	72.5	2.7	17.0	7.9
Humanities	72.9	5.7	13.3	8.1
Psychology	76.6	1.2	10.4	11.9
Other	68.9	6.2	18.9	6.1

Table 7—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to degree program,[1] by selected student and enrollment characteristics—Continued

	Master's other than MBA[2]	MBA	First-professional	Doctoral
Total undergraduate debt[3]				
Did not borrow	64.5	10.3	14.3	10.9
Borrowed, total	68.0	9.8	13.6	8.6
Less than $1,000	58.4	19.1	14.2	8.4
$1,000–4,999	68.7	9.0	13.1	9.2
$5,000–9,999	66.9	12.0	12.4	8.7
$10,000–19,999	67.6	8.6	15.9	7.9
$20,000 or more	78.1	4.3	7.2	10.3

— Too few cases for a reliable estimate.

[1]For students who enrolled in more than one program, highest level program.

[2]Includes post-master's certificate.

[3]Federal loan programs only.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Timing of Entry Within 4 Years

Doctoral students were the most likely to have enrolled within 1 year of graduation (78 percent did so), followed by first-professional students (55 percent), and then those entering a master's program other than an MBA (46 percent) (table 8). MBA program entrants were the least likely to enter this soon after graduation (29 percent). At the other extreme, one-third of MBA enrollees began more than 3 years after graduation (compared with 14 percent of other master's program entrants, and fewer entrants into other programs).

Carnegie Classification of Institution Attended

Table 9 shows where students enrolled to continue their education, using the classification scheme developed by the Carnegie Foundation for the Advancement of Teaching.[14] The aggregation used in the table distinguishes institutions according to the number and types of degrees awarded, the number of fields in which degrees were awarded, and the level of federal research funding. Research universities award at least 50 doctoral degrees annually, and receive at least 15.5 million dollars per year in federal research support (when classified in 1994). Doctoral universities award at least 10 doctorates in three or more fields annually or at least 20 doctorates in

[14]*A Classification of Institutions of Higher Education, 1994 edition* (Princeton, NJ: Carnegie Foundation for the Advancement of Teaching, 1994).

Table 8—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to number of months between bachelor's degree receipt and first enrollment, by degree program

	12 months or fewer	13–24 months	25–36 months	More than 36 months
Total	49.1	23.1	13.8	14.0
Highest program enrolled				
Master's other than MBA*	46.3	25.1	14.7	13.8
MBA	29.5	16.4	20.7	33.4
First-professional	55.5	25.6	10.8	8.1
Doctoral	78.4	13.0	5.0	3.6

*Includes post-master's certificate.

NOTE: Degree program is the highest program in which students enrolled. For students who enrolled in more than one program, first enrollment may refer to a different program. Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table 9—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to Carnegie classification of the institution attended for highest level program, by degree program

	Research university	Doctoral university	Master's college or university	All others
Total	37.6	19.0	31.6	11.9
Highest program enrolled				
Master's other than MBA*	33.0	19.0	38.5	9.5
MBA	30.9	23.7	35.4	10.1
First-professional	41.3	19.4	15.2	24.1
Doctoral	70.0	13.3	2.3	14.4

*Includes post-master's certificate.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

one or more fields, but do not meet the research university criteria. Master's universities award at least 20 master's degrees annually, but do not meet the research university or doctorate-granting criteria.[15] In the 1994 Carnegie classification, the universe of institutions included 125 research universities, 111 doctoral universities, and 529 master's universities. The residual category includes institutions that primarily offer undergraduate programs but that may award some graduate degrees, plus a number of specialized institutions.

Research universities enrolled about two out of three graduates who were pursuing a doctoral degree (70 percent), and 31–41 percent of graduates seeking other advanced degrees. Master's degree seekers were well distributed across research, doctoral, and master's universities. As might be expected, they were more likely than other degree seekers to enroll at master's universities (35–38 percent versus 2–15 percent of those seeking other degrees).

Field of Study

Among 1992–93 college graduates who enrolled for an advanced degree, business and education were the fields most commonly studied, with roughly 20 percent pursuing degrees in each of these fields (table 10). Gender differences were quite prominent, with males more likely than females to enroll in business and management; medicine and dentistry; engineering, mathematics, and computer science; and life and physical sciences. Females, on the other hand, were more likely than males to enroll in education; health sciences other than medicine and dentistry; and social and behavioral sciences. Enrollment rates in law and arts and humanities were not significantly different for males and females. Asians were more likely than blacks or whites to enroll in medicine and dentistry. Although there were apparent differences by race–ethnicity in other fields (such as engineering, math, and computer sciences), the differences were not statistically significant.

Of students who enrolled for a master's degree other than an MBA, about one-third (31 percent) sought a degree in education. About 10–13 percent of non-MBA master's seekers enrolled in each of the following aggregate fields: arts and humanities; social and behavioral sciences; engineering, mathematics, and computer science; business and management; and other health sciences.

[15] In previous classifications, this category was called "comprehensive universities." Note that master's universities may award doctoral degrees, but at a level that does not qualify them for designation as doctorate-granting institutions.

Table 10—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to field of study,[1] by degree program and undergraduate major

	Business and management	Education	Medicine/ dentistry	Other health sciences	Law	Engineering/ math/ computer science	Life and physical sciences	Social and behavioral sciences	Arts and humanities	All others
Total	18.1	21.5	5.2	10.3	8.1	8.5	5.6	9.7	8.1	4.9
Gender										
Male	23.1	9.5	7.7	8.0	9.9	14.2	8.0	7.2	8.3	4.1
Female	13.9	31.5	3.2	12.2	6.6	3.7	3.7	11.7	7.9	5.6
Race–ethnicity										
American Indian/Alaskan Native	—	—	—	—	—	—	—	—	—	—
Asian/Pacific Islander	15.7	8.8	16.8	9.2	12.7	16.8	4.3	4.4	6.0	5.3
Black, non-Hispanic	25.0	21.3	4.9	6.2	5.0	9.5	2.7	12.9	8.5	4.0
Hispanic	15.3	18.0	6.1	8.3	9.0	7.3	7.2	15.8	7.3	5.7
White, non-Hispanic	17.8	22.4	4.5	10.8	8.1	8.0	5.9	9.3	8.2	4.9
Highest program enrolled										
Master's other than MBA[2]	12.7	31.2	0.1	12.0	0.3	10.4	4.9	11.7	10.4	6.3
MBA	93.2	0.3	0	1.8	0	1.5	0	0.5	0.2	2.6
First-professional	0.5	2.2	29.3	8.5	53.4	1.6	0.5	0.4	2.3	1.3
Doctoral	3.0	5.3	11.2	9.8	5.4	12.0	23.6	18.1	8.8	2.8
Baccalaureate degree major										
Business and management	60.4	9.6	0.4	6.9	9.2	2.7	0.6	1.9	2.6	5.9
Education	4.5	65.5	0.5	3.3	2.7	1.1	1.7	5.6	10.4	4.8
Health professions	4.5	8.2	9.4	59.1	0	2.2	2.5	2.2	3.3	8.6
Public affairs/social services	30.2	10.4	0	4.4	9.4	0.9	0	39.2	1.8	3.7
Engineering	22.7	1.8	1.5	0.9	2.1	62.9	4.3	1.2	1.0	1.6

Table 10—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to field of study,[1] by degree program and undergraduate major—Continued

	Business and management	Education	Medicine/ dentistry	Other health sciences	Law	Engineering/ math/ computer science	Life and physical sciences	Social and behavioral sciences	Arts and humanities	All others
Mathematics, computer science, or physical sciences	9.9	7.8	5.7	3.7	3.8	34.1	26.4	3.7	1.8	3.3
Biological sciences	2.1	4.3	39.8	23.2	1.6	1.9	23.1	3.9	0	0.2
Social sciences[3]	20.2	20.2	2.4	4.7	17.2	1.0	1.6	24.1	5.5	3.1
Arts and humanities	8.4	17.9	2.3	5.9	9.1	0.5	1.5	8.5	41.2	4.6
Other	14.7	19.6	1.5	11.3	14.8	3.6	5.1	11.1	6.5	11.8
GPA at bachelor's institution										
Under 2.5	19.6	25.6	2.0	11.3	3.7	9.2	6.7	7.2	8.6	6.2
2.5 to 2.99	18.8	21.6	2.5	11.5	6.6	8.8	6.7	8.7	8.2	6.8
3.0 to 3.49	17.1	24.1	5.6	10.5	8.8	8.1	5.5	9.5	6.7	4.1
3.5 or above	18.9	17.9	7.1	9.1	9.4	8.7	4.6	11.4	9.4	3.7

[1]For students who enrolled in more than one program, field corresponding to highest level program.

[2]Includes post-master's certificate.

[3]Includes history and psychology as well as other social sciences. This category was aggregated for this table to make it consistent with the "social and behavioral sciences" column.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Several fields were studied in roughly equal proportions by non-MBA master's students and by doctoral students: arts and humanities (9–10 percent); social and behavioral sciences (12–18 percent); engineering, mathematics, and computer science (10–12 percent); and other health sciences (10–12 percent). About one-quarter of students seeking a doctorate (24 percent) were studying the life and physical sciences, compared with about 5 percent of those enrolled for a master's degree. About half of students who enrolled for a first-professional degree (53 percent) were studying law, and almost one-third were studying medicine or dentistry.

As one might expect, there was a relationship between students' undergraduate major and their field of graduate study:

- Among those who continued their education, three out of five undergraduate business majors pursued a degree in business, and two-thirds of education majors enrolled for an education degree.
- Health professions majors who pursued an advanced degree were no more likely than the average graduate to study medicine or dentistry, but were more likely to be enrolled in other health sciences (59 percent).
- Public affairs/social services majors who enrolled for an advanced degree spread across a number of fields, including primarily the social and behavioral sciences (39 percent), business and management (30 percent), education (10 percent) and law (10 percent).
- Sixty-three percent of engineering majors who continued their education did graduate work in engineering, mathematics, or computer science, as did 34 percent of those who had majored in mathematics, computer science, or the physical sciences. The latter group was also more likely than the average graduate to study the life and physical sciences (26 percent versus 6 percent of all graduates who pursued further study in this field).
- Relative to the average graduate who enrolled for an advanced degree, undergraduate majors in the biological sciences were more likely to pursue a degree in each of the following fields: medicine or dentistry (40 percent versus an average of 5 percent overall); other health sciences (23 percent versus 10 percent); and the life and physical sciences (23 percent versus 6 percent).
- Undergraduate social science majors (including history majors) were more likely than the average graduate to study law (17 percent versus 8 percent overall) or the social and behavioral sciences (24 versus 10 percent). Twenty percent went into business and management, and 20 percent went into education (both similar to bachelor's degree recipients overall).
- Forty-one percent of arts and humanities majors who continued their education pursued a graduate degree in the arts and humanities, compared with an average of 8 percent for all graduates.

Enrollment Status and Employment

Table 11 presents data on how those who continued their education combined schooling and employment. This table presents a snapshot of graduates' enrollment and employment status at a particular point in time—April 1997. Forty-five percent of graduates who ever enrolled for an advanced degree were enrolled in April 1997.[16] Employment is not differentiated for those enrolled part time because almost all part-time students were employed (compendium table I.1).

Students' patterns of enrollment and employment in April 1997 varied considerably depending on their degree program. About nine out of ten graduates who were working on a first-professional or doctoral degree (94 percent) were enrolled full time. The majority of master's students attended part time (65 percent of MBA students and 59 percent of those seeking other master's degrees).

Doctoral students were about twice as likely as first-professional students to combine employment with full-time enrollment (41 percent versus 22 percent), but it is important to note that teaching and research assistantships are included here as employment. Students working toward a first-professional degree were most likely to be enrolled full time but not employed (72 percent).

Table 11—Percentage distribution of 1992–93 bachelor's degree recipients who were enrolled in a graduate or first-professional program in April 1997, according to enrollment and employment status, by degree program

	Enrolled full time			Enrolled part time
	Total	Employed	Not employed	
Total	57.1	26.5	30.7	42.9
Degree program[1]				
Master's other than MBA[2]	41.4	27.0	14.4	58.6
MBA	35.0	14.9	20.2	65.0
First-professional	93.7	21.6	72.0	6.4
Doctoral	93.6	40.8	52.8	6.4

[1]Current or most recent program at the time of the second follow-up interview.

[2]Includes post-master's certificate.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

[16]U.S. Department of Education, National Center for Education Statistics, Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System. Not shown in a table.

Time of Attendance

Respondents who had enrolled for further education were also asked when they usually attended classes (weekdays, weeknights, or weekends). As with enrollment and employment, there was considerable variation among graduates who were in different degree programs in April 1997 with respect to when they attended classes.

Consistent with the findings on enrollment intensity, weekday attendance was by far the norm for doctoral and first-professional students (89–95 percent) (table 12). About one in five MBA students (22 percent) and two in five students in other master's programs (40 percent) attended on weekdays. About three-quarters of MBA students (77 percent) attended on weeknights. Very few graduates who were enrolled in April 1997 attended class on weekends (2 percent).[17]

Among students who were enrolled part time in a graduate or first-professional program in April 1997, about three out of four attended on weeknights. Eighty percent of full-timers attended on weekdays.

Table 12—Percentage distribution of 1992–93 bachelor's degree recipients who were enrolled in a graduate or first-professional program in April 1997 according to the time attended, by degree program and enrollment status

	Weekdays	Weeknights	Weekends
Total	53.6	44.1	2.4
Degree program[1]			
Master's other than MBA[2]	39.9	56.3	3.8
MBA	22.2	76.7	1.1
First-professional	94.8	4.9	0.3
Doctoral	89.2	10.5	0.3
Enrollment status April 1997			
Full-time	79.9	19.3	0.8
Part-time	18.5	77.0	4.5

[1]Current or most recent program at the time of the second follow-up interview.

[2]Includes post-master's certificate.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

[17]Similar results are obtained when the analysis is repeated for most recent enrollment (whether or not enrolled in April 1997) and for highest program enrollment.

Graduate Program Status

Students who were enrolled in a graduate program at the time of the Second Follow-up interview were asked a series of questions about how they were doing on three critical milestones: coursework; exams; and final project, thesis, or dissertation. This gives an indication of the amount of progress students have made in their programs. This progress reflects the combined effects of enrollment duration, enrollment intensity (full- or part-time), and success in the courses taken. These questions also provide some information about the requirements of different graduate programs.

Because a student had to be enrolled in a master's or doctoral program to be asked these questions, they were asked of only a subset of all students who had enrolled for further education. About one-third (32 percent) of students whose most recent enrollment was in a non-MBA master's program were enrolled as of the follow-up interview, as were 56 percent of MBA students and 71 percent of doctoral students.[18] Because the doctoral group is best represented and because time to degree is of particular policy interest for doctoral candidates, the discussion below will focus on students who were working toward a doctorate at the time of their interview.

Three out of five enrolled doctoral students (60 percent) were still working on their coursework when interviewed in 1997 (table 13). Half had not yet completed required examinations (this includes students who said that they were working on their exams). Those who had begun graduate study within 12 months of college graduation were more likely to report that exams were required, and more likely to report having completed their exams.

About half of enrolled doctoral students (52 percent) were working on their dissertations when they were interviewed in 1997—59 percent of those who enrolled within a year of completing the bachelor's degree, and 34 percent of those who began later.

Financial Aid

Table 14 presents information on how graduates who pursued financial aid financed their further education. Because receipt of financial aid can vary from year to year, the information in the table refers to the last academic year enrolled.

While the majority of 1992–93 college graduates who pursued further education received some form of financial aid to help meet their costs, 56 percent received some type of financial aid (table 14). Receipt of aid and sources of aid varied by degree program and enrollment status.

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[18]U.S. Department of Education, National Center for Education Statistics, Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table 10—Percentage distribution of 1992–93 bachelor's degree recipients who had enrolled in a graduate or first-professional program by 1997 according to field of study,[1] by degree program and undergraduate major—Continued

	Business and management	Education	Medicine/ dentistry	Other health sciences	Law	Engineering/ math/ computer science	Life and physical sciences	Social and behavioral sciences	Arts and humanities	All others
Mathematics, computer science, or physical sciences	9.9	7.8	5.7	3.7	3.8	34.1	26.4	3.7	1.8	3.3
Biological sciences	2.1	4.3	39.8	23.2	1.6	1.9	23.1	3.9	0	0.2
Social sciences[3]	20.2	20.2	2.4	4.7	17.2	1.0	1.6	24.1	5.5	3.1
Arts and humanities	8.4	17.9	2.3	5.9	9.1	0.5	1.5	8.5	41.2	4.6
Other	14.7	19.6	1.5	11.3	14.8	3.6	5.1	11.1	6.5	11.8
GPA at bachelor's institution										
Under 2.5	19.6	25.6	2.0	11.3	3.7	9.2	6.7	7.2	8.6	6.2
2.5 to 2.99	18.8	21.6	2.5	11.5	6.6	8.8	6.7	8.7	8.2	6.8
3.0 to 3.49	17.1	24.1	5.6	10.5	8.8	8.1	5.5	9.5	6.7	4.1
3.5 or above	18.9	17.9	7.1	9.1	9.4	8.7	4.6	11.4	9.4	3.7

[1]For students who enrolled in more than one program, field corresponding to highest level program.

[2]Includes post-master's certificate.

[3]Includes history and psychology as well as other social sciences. This category was aggregated for this table to make it consistent with the "social and behavioral sciences" column.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table 14—Percentage distribution of 1992–93 bachelor's degree recipients whose most recent enrollment was in a graduate or first-professional program according to financial aid received, by enrollment status in April 1997

	Package included loan, no grant[1]	Package included grant, no loan[1]	Package included grant and loan[1]	Campus job only	Employee benefits only	Other aid package	Did not receive aid
				Total[2]			
Total	25.0	11.8	7.4	4.6	4.9	2.8	43.6
Degree program[3]							
Master's other than MBA[4]	20.0	12.0	6.1	4.8	4.4	2.4	50.3
MBA	18.2	5.4	7.3	0.2	17.7	6.6	44.7
First-professional	52.8	5.3	13.2	1.0	0.2	1.2	26.4
Doctoral	24.8	28.1	8.1	13.8	0.8	3.8	20.7
				Enrolled full time in April 1997			
Total	39.3	14.5	12.8	5.2	0.8	3.5	24.0
Degree program[3]							
Master's other than MBA[4]	32.0	14.8	12.8	6.2	1.3	2.3	30.6
MBA	45.2	3.8	20.4	0	0	9.6	21.0
First-professional	57.7	6.6	13.2	0.4	0	1.8	20.2
Doctoral	26.6	27.2	9.7	11.3	1.1	5.5	18.6
				Enrolled part time in April 1997[5]			
Total	11.3	8.0	1.7	0.7	13.1	3.2	62.1
Degree program[3]							
Master's other than MBA[4]	12.1	7.9	1.9	0.4	10.8	3.2	63.8
MBA	3.3	5.7	0	0	25.4	4.1	61.6

[1]Refers only to the presence of grants or loans. Packages may have included other sources of aid.

[2]Includes students who were not enrolled in April 1997. Therefore, totals for enrolled full and part time in April 1997 do not always encompass the totals in the first table row. Columns refer to the most recent academic year enrolled.

[3]Current or most recent program as of the second follow-up interview.

[4]Includes post-master's certificate.

[5]The number of students enrolled part time in a first-professional or doctoral program was too small to produce reliable estimates.

NOTE: Grants include fellowships and tuition remission. Campus jobs include assistantships. Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Among students who were enrolled full time in April 1997, 76 percent received financial aid. First-professional and doctoral students were much more likely than master's students to receive financial aid. However, this appears to reflect differences in enrollment status: among those enrolled full time in April 1997, there is no evidence that students in some programs were more likely than others to receive aid.

One out of four students received an aid package that included loan assistance but no grants.[19] Fully half of students in a first-professional program (53 percent) received loans but no grants, compared with 18–25 percent of students in other programs. Among those enrolled full time in April 1997, first-professional students were more likely than non-MBA master's and doctoral students to receive loans but no grants.

Doctoral students, by contrast, were most likely to receive a package that included grants but no loans (28 percent versus 5–12 percent of students in other degree programs). Among full-time students, doctoral students were more likely than MBA and first-professional students to receive grants but no loans, but there is insufficient statistical evidence of such a difference between non-MBA master's and doctoral students. Doctoral students overall were also more likely than students in other degree programs to report financial aid packages in the form of on-campus employment alone (14 percent versus 0–5 percent of other students).

MBA seekers were most likely to receive only employer benefits to help cover their costs (18 percent versus up to 4 percent of students in other programs). Sole reliance on employer benefits was associated with part-time enrollment: one-quarter of MBA students enrolled part time in April 1997 received only employer benefits, while none of those enrolled full time did.[20]

Attainment to Date and Enrollment Status

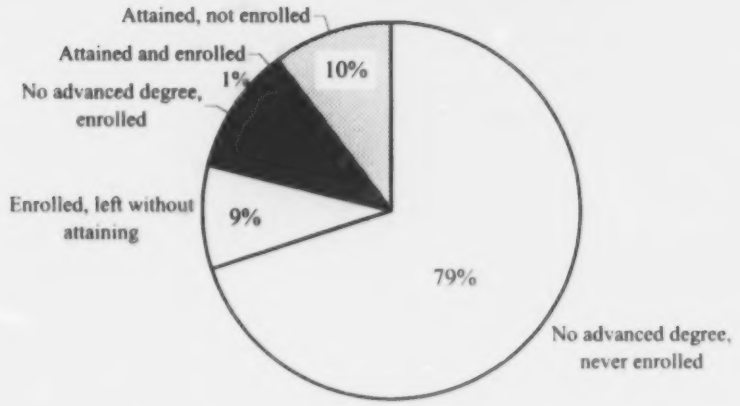
Finally, the B&B data tell us about graduate and first-professional degree persistence and attainment of 1992–93 bachelor's degree recipients. Recall that 30 percent of 1992–93 graduates had enrolled in a graduate or first-professional program between the time they graduated and when they were interviewed in 1997 (table 5). At the time of the 1997 interview, 21 percent had either attained an advanced degree or were enrolled (figure 6 and table 15). The rest had left without a degree. Of the 21 percent who persisted, about half (10 percent) had attained a degree and were no longer enrolled. Another 1 percent had attained one degree and were enrolled for

[19]As used here, grants include fellowships and tuition remission.

[20]Because this is based on a sample survey, it cannot be inferred that not a single MBA student enrolled full time in April 1997 received only employer benefits. While that may be true, a safer inference would be that such a pattern was indeed very rare.

additional education, and the remaining 10 percent were enrolled but had not yet earned an advanced degree.

Figure 6—Percentage distribution of 1992–93 bachelor's degree recipients according to attainment and enrollment status: 1997



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Persistence (defined as attainment or present enrollment) was lowest among students who had enrolled for a master's degree other than an MBA: 67 percent compared with 79–80 percent of those who enrolled for other advanced degrees. About one-quarter of students who enrolled for a doctoral degree (23 percent) had completed a degree and were still enrolled (it is not unusual for doctoral students to receive a master's degree as part of their program).

Because table 15 contains students who did not apply to graduate or first-professional programs, the percentages for the remaining rows reflect the cumulative effects of applications, enrollment, and persistence. For example, it was previously shown that students with high undergraduate GPAs applied to and enrolled in graduate or first-professional programs in proportionately larger numbers than students with lower grades (table 5). Thus, it is not surprising that students with high GPAs were more likely than those with lower grades to have attained an advanced degree or to be enrolled toward one in 1997.

Table 15—Percentage distribution of 1992–93 bachelor's degree recipients according to graduate or first-professional degree enrollment and attainment when interviewed in 1997, by selected enrollment characteristics

		Attained graduate/first-professional degree or currently enrolled			
	No graduate/ first-professional degree, not enrolled[1]	Total	No graduate/ first-professional degree, enrolled	Attained, not enrolled	Attained and enrolled
Total	78.9	21.1	9.5	10.2	1.4
Highest program enrolled					
Did not enroll	100.0	0	0	0	0
Enrolled, total	56.0	44.0	19.8	21.3	2.9
Master's other than MBA[2]	33.6	66.5	27.3	37.0	2.2
MBA	20.8	79.2	50.5	25.6	3.2
First-professional	21.2	78.8	36.6	38.2	4.1
Doctoral	19.9	80.1	37.5	19.3	23.3
All others	100.0	0	0	0	0
Months to first graduate enrollment[3]					
12 months or less	29.3	70.7	15.8	48.5	6.4
More than 12 months	28.8	71.2	47.5	20.8	2.9
GPA at bachelor's institution					
Under 2.5	92.2	7.8	4.6	2.9	0.3
2.5 to 2.99	82.4	17.6	8.5	8.5	0.7
3.0 to 3.49	75.2	24.8	11.1	12.2	1.5
3.5 or above	71.0	29.0	11.9	14.2	2.9
GRE score summary[4]					
Top 25 percent, 3 sections	44.9	55.1	27.7	20.6	6.9
Top 25 percent, 2 sections	47.5	52.6	20.3	23.6	8.7
Top 25 percent, 1 section	53.1	46.9	19.0	23.9	4.1
Middle 50 percent, 3 sections	56.4	43.6	14.7	26.3	2.7
All others	59.5	40.5	23.1	16.7	0.6
Total undergraduate debt[5]					
Did not borrow	78.0	22.0	9.8	10.6	1.6
Borrowed, total	80.8	19.2	9.1	9.0	1.1
Less than $1,000	77.9	22.2	17.4	3.9	0.9
$1,000–4,999	81.1	18.9	8.9	8.8	1.2
$5,000–9,999	82.1	17.9	8.2	9.0	0.7
$10,000–19,999	80.3	19.7	9.4	9.1	1.2
$20,000 or more	77.3	22.7	7.0	13.1	2.6

[1]Includes those who enrolled but left before 1997.

[2]Includes post-master's certificate.

[3]For those with graduate enrollment by 1997.

[4]Summarizes student's quartile rank on the composite score of all three GRE general exam subtest scores (verbal, quantitative, and analytic).

[5]Federal loan programs only.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

The analysis of table 5 also showed that students who had borrowed under federal loan programs applied to graduate or first-professional school in slightly smaller proportions than nonborrowers, and that their enrollment rate consequently lagged behind that of nonborrowers. These differences carry forward to the aggregate percentages for persistence and attainment presented in table 15: those who had borrowed were slightly less likely than nonborrowers to have attained an advanced degree or to be enrolled for one in 1997 (19 versus 22 percent).

Summary and Conclusion

When they graduated from college, a large majority (85 percent) of 1992–93 bachelor's degree recipients expected to earn an advanced degree at some time in the future. Expectations declined over time. Four years later, in 1997, 72 percent expected to earn an advanced degree. By the time of the 1997 follow-up, 41 percent had applied for admission to a graduate or first-professional program; 35 percent had been accepted; and 30 percent had enrolled. Again at the time of the 1997 interview, 21 percent had either attained a degree or were enrolled. This group was roughly evenly divided between those who had earned a degree and were no longer enrolled and those who were enrolled at the time (a few of whom had already earned an advanced degree as well).

Female bachelor's degree recipients were slightly more likely than their male counterparts to report advanced degree expectations in 1993, but there was no significant difference in 1997. There were no gender differences evident in the rates at which male and female college graduates applied for admission to an advanced degree program, were accepted, or enrolled. However, gender differences were pronounced in terms of the specific degree programs in which they enrolled. Males were more likely than females to enroll in MBA, doctoral, and first-professional programs, while females were more likely than males to enroll in non-MBA master's degree programs.

There were differences by race as well as gender. Black and Hispanic graduates were more likely than white graduates in 1997 to expect to earn an advanced degree, and the expectations of whites declined more than those of blacks between 1993 and 1997. Asian/Pacific Islander graduates were more likely than white bachelor's degree recipients to apply to graduate or first-professional programs by 1997, and among those who enrolled in a graduate or first-professional program, they were twice as likely as graduates from other racial–ethnic groups to enroll in a first-professional program.

Undergraduate grades were positively related to participation in graduate and first-professional education. Graduates with higher GPAs were more likely than those with lower

GPAs to take entrance examinations and apply, more likely to be accepted if they applied, and more likely to enroll if accepted. Consistent with this pattern, graduates with higher GPAs were more likely than those with lower grades to have attained a degree or still be enrolled in 1997.

Although bachelor's degree recipients who had borrowed as undergraduates had slightly greater expectations than nonborrowers in 1997 about earning an advanced degree, borrowers were slightly less likely than nonborrowers to have taken any entrance examinations by 1997 (37 percent versus 40 percent) and to have applied for admission (38 percent versus 42 percent). However, among those who applied, borrowers and nonborrowers were accepted and enrolled at comparable rates. Among borrowers, the level of debt did not appear to be related to the likelihood of applying, being accepted, or enrolling.

COMPENDIUM TABLES

The Employment and Enrollment Status
of 1992–93 College Graduates in 1997

Section I—Employment Status

Employment and Enrollment Status as of April 1997

- College graduates who were not working or who were working part time were often enrolled full time: 44 percent of college graduates who reported being out of the labor force in April 1997 and 24 percent who were unemployed were enrolled full time in further education. The same was true for 29 percent of those who were working part time. In contrast, 2 percent of college graduates working full time in April 1997 were enrolled full time (table I.1).
- In April 1997, 89 percent of college graduates were employed, and 18 percent were enrolled in further education. 13 percent were both enrolled and employed (table I.1).
- Males were slightly more likely than females to be employed as of April 1997 (91 percent versus 88 percent); males and females were equally as likely to be enrolled in further education (17 and 18 percent, respectively) (table I.1)
- Graduates whose parents had advanced degrees were more likely to be enrolled in further education in April 1997 than graduates whose parents had less than a bachelor's degree. Graduates whose parents had bachelor's and advanced degrees were about equally likely to be enrolled in further education in April 1997 (19 percent and 23 percent, respectively) (table I.1).
- Graduates whose parents had advanced degrees were also more likely than those whose parents had a college degree or less education to be enrolled full time and not employed in April 1997 (table I.1).
- Whether or not a graduate had borrowed money to attend college did not appear to be related to the enrollment status of college graduates. Nineteen percent of nonborrowers and 17 percent of borrowers were enrolled at that time (table I.1).
- Among college graduates who had borrowed money to finance their undergraduate educations, the amount of money they borrowed (from less than $1,000 to $20,000 or more) did not appear to be related to their employment or enrollment status as of April 1997 (table I.1).
- Eighty percent of college graduates who were employed and not enrolled in April 1994 reported having that same status in April 1997. Among graduates who were neither enrolled nor employed in April 1994, 64 percent were employed and not enrolled in April 1997 (table I.1).
- In April 1997, approximately 89 percent of 1992–93 bachelor's degree recipients reported being employed: 81 percent were working full time, and 8 percent were

working part time. An additional 2.7 percent were unemployed. The overall unemployment rate (excluding those out of the labor force) was 2.9 percent (table I.2).

- Among 1992–93 bachelor's degree recipients, men were slightly more likely than women to be employed (91 percent versus 88 percent). Women were more likely than men to be working part time (11 percent versus 6 percent) (table I.2).
- Although employment rates for 1992–93 college graduates were generally high, they differed according to major field of study. For example, 92 percent of students who had majored in a professional field of study were employed in April 1997, compared with 84 percent who had majored in the arts and sciences (table I.2). Similarly, the unemployment rate in April 1997 for those who had majored in the arts and sciences was slightly higher than the rate for those who had majored in a professional field (4 percent versus 2 percent) (table I.2).
- Students with undergraduate degrees from private, not-for-profit 4-year doctorate-granting institutions were less likely to be employed than students from private, not-for-profit 4-year nondoctorate-granting institutions (84 percent versus 90 percent) (table I.2).
- College graduates who were employed and not enrolled in April 1994 were more likely than graduates who reported being neither employed nor enrolled at that time to report that they were employed in April 1997 (92 percent versus 75 percent) (table I.2).
- College graduates who were enrolled full time and not employed in April 1994 were more likely to be out of the labor force in April 1997 than graduates who were enrolled full time and employed, employed and not enrolled at all, or enrolled part time in April 1994 (24 percent, versus 8, 6, and 9 percent, respectively) (table I.2).
- Unemployment rates in April 1997 for graduates who were not employed but enrolled full time or neither employed nor enrolled in 1994 were higher than the rate for students who were enrolled part time in 1994 (7 percent and 6 percent, respectively, versus 1 percent) (table I.2).
- In April 1997, females were slightly more likely than males to have held four or more jobs since graduation (30 percent versus 26 percent) (table I.3).
- Bachelor's degree recipients in 1992–93 who had two or more children had held a lower average number of jobs (2.2) since graduation than those who had one child (2.6) or no children (3.0) (table I.3).
- Graduates who had received their bachelor's degree at age 24 or younger (including those 22 or younger and those 23–24) had held more jobs, on average, since graduation (3.1 and 3.0, respectively) than those who were older when they received their degree. Those who were 25–29 when they earned the degree had held 2.6 jobs and those 30 and over had held 2.2 jobs since graduation (table I.3).
- With the exception of a slight difference between borrowers who owed $1,000–4,999 and those who owed $10,000–19,999, there were no differences in the average number of jobs held since graduation among students with different levels of debt. Although it

appears that borrowers who owed less than $1,000 were more likely to report a higher average number of jobs than others, there is not enough evidence to make this conclusion. (table I.3).

- Students whose parents had not continued their education past high school (less than high school or a high school diploma) had held fewer jobs, on average, between their graduation and April 1997 than those whose parents had attained a bachelor's or advanced degree (table I.3).
- There were some differences by occupation type in the number of jobs held since graduation. For example, college graduates in business and management had held an average of 2.6 jobs, compared with their counterparts who were educators or in service positions, who had been employed in an average of 3.2 jobs. Educators include teachers in non-elementary/secondary settings, in addition to K–12 teachers. Those employed in engineering had also held fewer jobs than those employed in school teaching or service (table I.3).
- Students who were enrolled full time and working in April 1994 reported in 1997 that they had held, on average, a greater number of jobs since graduation than graduates who reported in 1994 that they were enrolled full time and not employed or those enrolled part time (3.5 versus 2.7 and 2.8 respectively) (table I.3).

Occupation Types and Salaries

- With respect to their April occupation, about one-fifth (21 percent) of college graduates who were employed in April 1997 had jobs in business and management, and 16 percent of graduates were working as teachers. Fourteen percent had administrative support jobs, and 11 percent had jobs in professional fields other than education, business, health, or engineering (table I.4).
- Female 1992–93 bachelor's degree recipients who were employed in April 1997 were more likely than their male counterparts to be school teachers (22 percent versus 9 percent), health professionals (11 percent versus 4 percent), or administrative or clerical support workers (17 percent versus 10 percent). On the other hand, males were more likely than females to be in sales occupations (10 percent versus 6 percent) (table I.4).
- One-quarter of graduates who were enrolled part time in April 1994 reported that they were working as school teachers in April 1997. A similar proportion of those enrolled full time and employed also were working as school teachers.
- Thirty-one percent of respondents whose highest educational attainment by 1997 was a postbaccalaureate certificate and twenty-four percent of respondents whose highest degree by 1997 was a master's degree reported that they were working as school teachers in April 1997.
- About one in five graduates (19 percent) who were neither enrolled nor employed in April 1994 reported that they held administrative or clerical jobs in April 1997.

- Twenty-two percent of graduates who were not enrolled but employed in April 1994 reported that they were employed in business and management jobs in 1997. Fifteen percent and 14 percent of those who were not enrolled but employed in April 1994 were employed as school teachers and administrative personnel, respectively. About one in ten graduates (9 percent) who were not enrolled but employed in April 1994 reported that they were employed in sales jobs in April 1997 (table I.4).
- Among 1992–93 college graduates employed full time in April 1997, males had significantly higher average salaries than females ($38,430 versus $30,578).[21] This is consistent with the findings in the 1-year follow-up of the Baccalaureate and Beyond Longitudinal Study (B&B:93/94)[22] (table I.5).
- The average full-time salaries of college graduates who had majored in professional fields (business and management, education, engineering, health, or public affairs/social services) were higher than those who had majored in the arts and sciences ($35,525 versus $32,890) (table I.5).
- Among the professional fields of study that college graduates chose as majors, the average full-time salary was higher for those who had majored in engineering ($44,524), health professions ($39,421), or business fields ($37,454) than it was for graduates who had majored in public affairs/social services ($30,563) or education ($26,513) (table I.5).
- While average annual April 1997 salaries seemed to be higher for graduates who had reported in 1994 that they were enrolled full time and not employed ($35,126) than for those who were enrolled full time and employed, or those employed and not enrolled ($31,836 and $34,611, respectively), there is not enough evidence to make this conclusion (table I.5).
- While average annual April 1997 salaries appeared to be higher for graduates who had reported in 1994 that they had $20,000 or more in undergraduate debt than for those with less debt (ranging from less than $1,000 to $19,999), there is not enough evidence to make this conclusion (table I.5).
- Graduates with bachelor's degrees from private, not-for-profit doctorate-granting institutions earned, on average, higher annual salaries than graduates from private, not-for-profit nondoctorate-granting institutions and public doctorate or non-doctorate-granting institutions ($38,806 versus $33,858, $34,340, and $31,967) (table I.5).

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[21]Salaries are reported for college graduates who were employed full time in April 1997, regardless of their enrollment status (81 percent of all graduates) (table I.5). The salaries represent the annualized wages/salaries reported for the April job. Thus, if the respondent reported an hourly or monthly wage, it was annualized. Yearly salaries that exceeded $500,000 were reset with a value of $500,000. Consistent with the 1993–94 B&B report, average salaries (column 6) include salaries that range from $1,000 to $500,000.

[22]See A. McCormick and L. Horn, *A Descriptive Summary of 1992–93 Bachelor's Degree Recipients 1 Year Later, With An Essay on Time to Degree* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1996), 72.

Unemployment

The unemployment rates were calculated for April 1997 (about 4 years after graduation) and are based on all college graduates who were in the labor force, regardless of their enrollment status. Note that 44 percent of graduates who were out of the labor force in April 1997 were enrolled full time in school at that time (see table I.1).

- In April 1997, the unemployment rate for 1992–93 college graduates was 2.9 percent (the rate excludes those not in the labor force) (table I.6). As a point of reference, the U.S. unemployment rate for April 1997 was 5.0 percent (for adults 25 and older, it was 3.7 percent).[23]
- The unemployment rate for college graduates who had majored in professional fields of study was lower than the rate for those who had majored in the arts and sciences (2 percent versus 4 percent) (table I.6).
- Nearly 40 percent of 1992–93 college graduates had experienced some period of unemployment since their graduation. Among those who had ever been unemployed, the longest duration of unemployment averaged 7 consecutive months (table I.6).
- While unemployment rates seemed to be higher for Asian/Pacific Islander and black, non-Hispanic graduates (7 and 5 percent, respectively) than those for white, non-Hispanic graduates (3 percent), there is not enough evidence to support the conclusion that these unemployment rates are significantly different (table I.6).
- The 1992–93 college graduates who reported being unemployed in April 1997 reported that they had been unemployed for an average of 16 months since graduation. Members of this group indicated that the longest average period of unemployment they had experienced was 13 months (table I.6).
- Between April 1994 and April 1997, graduates who were employed but not enrolled in April 1994 reported that they had experienced fewer months of unemployment (6 months), on average, than graduates who were enrolled full time and employed in 1994 (7 months); graduates who were enrolled full time and not employed in 1994; or graduates who were neither enrolled nor employed in 1994 (14 months each) (table I.6).
- Between 1994 and 1997, graduates who were employed but not enrolled in 1994 reported that their longest average period of unemployment was 5 months. For those who were enrolled full time and employed, or those enrolled part time, in 1994, the longest average spell of unemployment was 7 months. Among those enrolled full time but not employed, or those neither enrolled nor employed, in 1994, the longest duration of unemployment during this period averaged 13 months (table I.6).

[23]Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, table A-9, seasonally adjusted.

Table I.1—Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in April 1997, and percentages employed and enrolled, by selected characteristics

	Not enrolled		Part-time enrolled		Full-time enrolled		Total	
	Employed	Not employed	Employed	Not employed	Employed	Not employed	Employed[1]	Enrolled[2]
Total	76.3	6.1	8.7	0.5	4.3	4.2	89.3	17.7
Gender								
Male	78.5	4.1	7.7	0.4	4.4	5.0	90.5	17.4
Female	74.4	7.7	9.5	0.5	4.3	3.6	88.2	17.9
Race–ethnicity								
American Indian/Alaskan Native	76.4	10.9	6.5	2.7	0	3.5	82.9	12.7
Asian/Pacific Islander	69.7	8.4	9.8	0.6	2.1	9.4	81.6	21.9
Black, non-Hispanic	79.4	4.7	7.3	0.8	4.1	3.8	90.8	15.9
Hispanic	70.5	8.5	10.4	1.1	4.6	4.9	85.5	21.0
White, non-Hispanic	76.8	5.8	8.6	0.4	4.5	4.0	89.9	17.4
Parents' educational attainment								
Less than high school	77.5	7.0	9.1	0.8	2.9	2.7	89.5	15.6
High school or equivalency	81.2	5.9	7.9	0.4	2.7	1.9	91.8	12.9
Some postsecondary education	78.1	5.5	8.7	0.4	4.4	3.0	91.1	16.5
Bachelor's degree	75.5	5.7	9.3	0.2	4.5	4.8	89.3	18.8
Advanced degree	70.4	6.6	9.0	0.6	6.0	7.5	85.4	23.1
Marital status in 1997								
Never married	74.5	4.9	8.4	0.4	5.7	6.2	88.5	20.7
Married/cohabit as married	77.6	7.3	8.9	0.4	3.1	2.6	89.7	15.1
Divorced/separated/widowed	78.1	4.3	9.1	1.2	4.2	3.1	91.4	17.5
Number of children in 1997								
No children	76.0	4.5	8.6	0.4	5.2	5.3	89.8	19.5
One	79.0	8.9	7.7	0.7	1.9	1.9	88.6	12.1
Two or more children	74.6	12.2	10.3	0.5	1.9	0.5	86.8	13.2
Age received bachelor's degree								
22 or younger	73.5	5.2	8.8	0.3	5.5	6.7	87.9	21.3
23–24	79.2	6.1	8.1	0.5	2.8	3.3	90.2	14.8
25–29	78.8	7.0	7.5	0.4	5.0	1.3	91.3	14.2
30 or older	78.8	7.4	9.7	0.9	2.4	0.9	90.9	13.8
Degree-granting institution (undergraduate)								
Public 4-year								
Nondoctorate-granting	77.7	6.4	9.9	0.7	3.1	2.3	90.6	15.9
Doctorate-granting	76.6	5.2	8.6	0.4	4.7	4.5	89.9	18.2
Private, not-for-profit 4-year								
Nondoctorate-granting	75.3	5.9	9.4	0.3	5.4	3.7	90.2	18.8
Doctorate-granting	72.8	7.6	6.7	0.6	4.4	7.9	83.8	19.6
Other	80.6	9.8	6.0	0	2.5	1.2	89.0	9.6

Table I.1—Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in April 1997, and percentages employed and enrolled, by selected characteristics—Continued

	Not enrolled		Part-time enrolled		Full-time enrolled		Total	
	Employed	Not employed	Employed	Not employed	Employed	Not employed	Employed[1]	Enrolled[2]
Total undergraduate debt[3]								
Did not borrow	75.4	6.1	8.9	0.5	4.2	4.9	88.5	18.5
Borrowed, total	77.4	5.9	8.4	0.4	4.6	3.3	90.4	16.7
Less than $1,000	73.6	3.8	10.2	0	8.8	3.7	92.5	22.6
$1,000–4,999	76.8	5.5	9.7	0.5	4.1	3.4	90.6	17.8
$5,000–9,999	78.0	7.7	7.0	0.6	3.6	3.2	88.5	14.3
$10,000–19,999	77.5	4.9	8.4	0.1	5.6	3.5	91.5	17.6
$20,000 or more	80.1	6.1	7.4	1.2	3.1	2.1	90.6	13.9
Baccalaureate degree major								
Professional fields	80.2	5.4	9.1	0.3	2.9	2.1	92.2	14.4
Business and management	85.8	4.9	5.5	0.2	2.0	1.7	93.2	9.3
Education	71.0	6.7	16.3	0.6	3.8	1.7	91.1	22.3
Engineering	80.0	2.3	11.0	0.1	3.1	3.5	94.1	17.7
Health professions	79.2	6.8	6.2	0.3	3.7	3.9	89.1	14.0
Public affairs/social services	80.4	6.5	8.7	0.3	3.6	0.5	92.8	13.1
Arts and sciences	68.6	7.2	8.5	0.8	6.7	8.4	83.7	24.3
Biological sciences	50.7	7.3	7.3	0.9	9.3	24.6	67.3	42.0
Mathematics and other sciences	74.5	4.7	8.1	0.2	5.0	7.6	87.6	20.8
Social science	71.1	6.2	11.3	0.6	5.4	5.5	87.7	22.8
History	72.8	4.3	8.4	0.8	3.4	10.4	84.6	22.9
Humanities	71.7	9.5	7.1	1.2	6.5	4.0	85.3	18.8
Psychology	63.9	9.5	6.6	1.1	11.6	7.2	82.1	26.5
Other	79.9	5.9	7.7	0.4	4.2	2.1	91.7	14.3
Highest degree attained by 1997								
Bachelor's degree	77.5	5.9	8.8	0.5	3.8	3.4	90.2	16.5
Postbaccalaureate certificate	68.3	6.9	13.9	0	5.3	5.7	87.4	24.8
Master's degree	72.6	5.6	7.4	0.6	7.6	6.2	87.7	21.8
First-professional degree	54.3	11.6	0.9	0	7.8	25.5	62.9	34.1
Doctoral degree	—	—	—	—	—	—	—	—
Employment status in April 1997								
Full-time	87.9	(*)	9.8	(*)	2.4	(*)	100.0	12.2
Part-time	61.7	(*)	9.1	(*)	29.2	(*)	100.0	38.3
Unemployed	(*)	69.1	(*)	6.5	(*)	24.4	(*)	30.9
Out of the labor force	(*)	52.3	(*)	3.5	(*)	44.2	(*)	47.7

Table 1.1—Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in April 1997, and percentages employed and enrolled, by selected characteristics—Continued

	Not enrolled		Part-time enrolled		Full-time enrolled		Total	
	Employed	Not employed	Employed	Not employed	Employed	Not employed	Employed[1]	Enrolled[2]
April 1997 occupation								
Business and management	90.3	(*)	7.7	(*)	2.0	(*)	100.0	9.7
Educator	71.5	(*)	21.2	(*)	7.3	(*)	100.0	28.5
Engineering	86.8	(*)	10.2	(*)	3.0	(*)	100.0	13.3
Health professions	84.9	(*)	8.0	(*)	7.1	(*)	100.0	15.1
Other professions	87.6	(*)	7.4	(*)	5.1	(*)	100.0	12.4
Computer science, programming	86.8	(*)	11.2	(*)	1.9	(*)	100.0	13.2
Noncomputer technician	64.2	(*)	11.2	(*)	24.6	(*)	100.0	35.8
Administrative, clerical, support	89.3	(*)	5.4	(*)	5.3	(*)	100.0	10.7
Mechanic, operator, laborer	88.6	(*)	7.4	(*)	4.1	(*)	100.0	11.5
Sales	93.9	(*)	5.3	(*)	0.9	(*)	100.0	6.1
Service	83.2	(*)	4.8	(*)	12.0	(*)	100.0	16.8
Military, protective services	84.3	(*)	12.8	(*)	2.9	(*)	100.0	15.7
Other, uncodeable	88.2	(*)	4.3	(*)	7.5	(*)	100.0	11.9
Enrollment/employment status in April 1994								
Full-time enrolled, employed	67.3	5.2	11.6	0.4	9.5	6.2	88.3	27.6
Full-time enrolled, not employed	60.2	9.7	4.5	0.7	6.3	18.7	71.0	30.1
Part-time enrolled	61.8	4.3	22.3	0.5	5.5	5.6	89.6	33.9
Not enrolled, employed	80.3	4.8	8.0	0.4	3.6	2.9	92.0	14.9
Not enrolled, not employed	64.3	20.3	5.8	1.0	4.9	3.8	74.9	15.4

—Too few cases for a reliable estimate.

*Not applicable.

[1]Includes employed respondents who are also enrolled. Only those who were enrolled and/or employed were included in this table. Therefore, all those with an occupation other than student were employed.

[2]Includes enrolled respondents who are also employed.

[3]Federal loan programs only.

NOTE: Percentages in the first six columns may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table I.2—Percentage distribution of 1992–93 bachelor's degree recipients according to their employment status in April 1997 and the corresponding unemployment rate, by selected characteristics

	Employment status in April 1997					
	Total employed	Full-time	Part-time	Unemployed (includes with and without benefits)	Out of the labor force	Unemployment rate[1]
Total	89.3	81.0	8.3	2.7	8.1	2.9
Gender						
Male	90.5	84.8	5.7	2.7	6.7	2.9
Female	88.2	77.8	10.5	2.6	9.2	2.9
Race–ethnicity						
American Indian/Alaskan Native	82.9	68.4	14.5	2.5	14.6	2.9
Asian/Pacific Islander	81.6	74.0	7.6	5.9	12.6	6.7
Black, non-Hispanic	90.8	86.4	4.3	4.3	5.0	4.5
Hispanic	85.5	75.7	9.8	2.7	11.8	3.0
White, non-Hispanic	89.9	81.4	8.5	2.3	7.8	2.5
Parents' educational attainment						
Less than high school	89.5	81.6	7.9	4.3	6.2	4.6
High school or equivalency	91.8	83.6	8.2	2.0	6.2	2.1
Some postsecondary education	91.1	84.2	6.9	2.3	6.6	2.4
Bachelor's degree	89.3	81.7	7.7	2.8	7.9	3.1
Advanced degree	85.4	75.1	10.3	3.2	11.4	3.7
Marital status in 1997						
Never married	88.5	80.7	7.8	3.6	7.9	3.9
Married/cohabit as married	89.7	81.0	8.7	1.9	8.4	2.1
Divorced/separated/widowed	91.4	83.4	8.0	2.0	6.6	2.1
Number of children in 1997						
No children	89.8	82.2	7.6	2.9	7.3	3.1
One	88.6	78.1	10.5	2.0	9.4	2.2
Two or more children	86.8	76.6	10.2	1.8	11.4	2.0
Age received bachelor's degree						
22 or younger	87.9	80.3	7.5	2.6	9.6	2.9
23–24	90.2	83.0	7.2	3.0	6.9	3.2
25–29	91.3	82.9	8.5	3.5	5.2	3.7
30 or older	90.9	79.2	11.7	1.5	7.7	1.6
Degree-granting institution (undergraduate)						
Public 4-year						
Nondoctorate-granting	90.6	82.1	8.5	2.4	7.0	2.6
Doctorate-granting	89.9	82.1	7.8	2.5	7.6	2.7
Private, not-for-profit 4-year						
Nondoctorate-granting	90.2	80.3	10.0	2.5	7.3	2.7
Doctorate-granting	83.8	76.3	7.5	3.7	12.6	4.2
Other	89.0	80.8	8.3	3.2	7.8	3.5

Table I.2—Percentage distribution of 1992–93 bachelor's degree recipients according to their employment status in April 1997 and the corresponding unemployment rate, by selected characteristics —Continued

	Employment status in April 1997					
	Total employed	Full-time	Part-time	Unemployed (includes with and without benefits)	Out of the labor force	Unemployment rate[1]
Total undergraduate debt[2]						
Did not borrow	88.5	80.5	8.0	2.7	8.8	3.0
Borrowed, total	90.4	81.8	8.6	2.5	7.2	2.7
Less than $1,000	92.5	79.7	12.9	1.1	6.3	1.2
$1,000–4,999	90.6	83.1	7.5	2.2	7.2	2.3
$5,000–9,999	88.5	79.4	9.1	3.3	8.2	3.6
$10,000–19,999	91.5	82.5	9.0	2.2	6.4	2.3
$20,000 or more	90.6	84.9	5.7	2.5	6.9	2.7
Baccalaureate degree major						
Professional fields	92.2	85.3	6.9	2.1	5.8	2.2
Business and management	93.2	89.2	4.0	2.1	4.6	2.2
Education	91.1	80.8	10.3	2.1	6.8	2.3
Engineering	94.1	91.1	2.9	1.2	4.8	1.2
Health professions	89.1	76.6	12.5	2.6	8.4	2.8
Public affairs/social services	92.8	83.8	9.0	2.0	5.3	2.1
Arts and sciences	83.7	73.5	10.2	3.7	12.6	4.2
Biological sciences	67.3	56.8	10.5	5.2	27.5	7.2
Mathematics and other sciences	87.6	80.4	7.2	2.4	10.0	2.7
Social science	87.7	79.3	8.4	3.5	8.8	3.8
History	84.6	76.7	8.0	2.9	12.5	3.3
Humanities	85.3	71.0	14.3	4.0	10.7	4.4
Psychology	82.1	71.5	10.7	4.4	13.5	5.1
Other	91.7	82.7	9.0	2.3	6.0	2.5
Highest degree attained by 1997						
Bachelor's degree	90.2	82.2	8.0	2.3	7.5	2.5
Postbaccalaureate certificate	87.4	78.0	9.4	3.1	9.5	3.4
Master's degree	87.7	76.9	10.8	4.5	7.8	4.9
First-professional degree	62.9	52.4	10.5	8.0	29.0	11.3
Doctoral degree	—	—	—	—	—	—
April 1997 occupation						
Business and management	94.2	89.7	4.5	1.4	4.4	1.5
Educator	91.7	79.8	11.9	2.6	5.7	2.8
Engineering	95.5	93.2	2.4	0.7	3.8	0.7
Health professions	90.3	75.8	14.5	3.5	6.2	3.8
Other professions	91.2	83.3	7.9	3.7	5.1	3.9
Computer science, programming	95.1	92.7	2.4	1.7	3.2	1.8
Noncomputer technician	84.4	65.4	19.0	3.0	12.7	3.4
Administrative, clerical, support	88.1	76.8	11.4	4.3	7.5	4.7
Mechanic, operator, laborer	94.6	86.3	8.3	1.2	4.2	1.2
Sales	94.5	90.8	3.7	2.1	3.4	2.2
Service	86.7	68.5	18.3	5.2	8.1	5.6
Military, protective services	97.2	94.4	2.8	0.8	2.0	0.8
Other, uncodeable	80.6	74.0	6.5	5.1	14.4	5.9

Table I.2—Percentage distribution of 1992–93 bachelor's degree recipients according to their employment status in April 1997 and the corresponding unemployment rate, by selected characteristics —Continued

	Employment status in April 1997					
	Total employed	Full-time	Part-time	Unemployed (includes with and without benefits)	Out of the labor force	Unemployment rate[1]
Enrollment/employment status in April 1994						
Full-time enrolled, employed	88.3	75.8	12.4	3.6	8.2	3.9
Full-time enrolled, not employed	71.0	60.1	10.9	5.4	23.6	7.1
Part-time enrolled	89.6	79.5	10.2	1.3	9.1	1.4
Not enrolled, employed	92.0	84.6	7.4	2.3	5.7	2.5
Not enrolled, not employed	74.9	62.8	12.2	4.4	20.7	5.5

—Too few cases for a reliable estimate.

[1]Excludes respondents out of the labor force.

[2]Federal loan programs only.

NOTE: Details may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table I.3—Percentage distribution of 1992–93 bachelor's degree recipients according to the number of jobs held since graduation and the average number of jobs, by selected characteristics

	Number of jobs					Average
	None	*One job*	*Two jobs*	*Three jobs*	*Four jobs*	*number of jobs*
Total	1.6	22.6	26.4	21.3	28.1	2.8
Gender						
Male	1.4	24.0	28.0	20.7	25.9	2.7
Female	1.8	21.5	25.1	21.8	29.8	2.9
Race–ethnicity						
American Indian/Alaskan Native	8.7	22.4	30.5	13.2	25.3	2.6
Asian/Pacific Islander	4.3	22.0	35.8	20.6	17.4	2.5
Black, non-Hispanic	2.0	25.8	23.0	20.2	29.0	2.9
Hispanic	1.7	27.0	28.9	16.1	26.4	2.7
White, non-Hispanic	1.4	22.2	25.8	21.8	28.8	2.9
Parents' educational attainment						
Less than high school	2.7	38.1	25.6	18.4	15.2	2.2
High school or equivalency	1.7	25.3	26.9	19.9	26.2	2.7
Some postsecondary education	1.5	21.2	28.1	23.4	25.9	2.8
Bachelor's degree	1.2	20.7	25.3	22.0	30.8	3.0
Advanced degree	1.7	19.4	25.7	21.6	31.6	3.0
Marital status in 1997						
Never married	1.2	17.9	25.0	22.6	33.2	3.1
Married/cohabit as married	1.9	26.0	28.0	20.4	23.7	2.6
Divorced/separated/widowed	2.1	28.9	22.5	19.6	27.0	2.8
Number of children in 1997						
No children	1.3	19.6	25.3	22.4	31.4	3.0
One	1.4	27.5	30.2	19.4	21.6	2.6
Two or more children	3.8	35.0	28.5	17.4	15.5	2.2
Age received bachelor's degree						
22 or younger	1.2	16.7	26.8	22.5	32.8	3.1
23–24	1.3	20.3	25.7	22.1	30.7	3.0
25–29	0.9	23.8	28.5	23.1	23.8	2.6
30 or older	3.9	41.4	24.2	16.0	14.5	2.2
Degree-granting institution (undergraduate)						
Public 4-year						
Nondoctorate-granting	2.1	21.2	26.2	23.0	27.6	2.9
Doctorate-granting	1.1	21.9	27.2	20.6	29.3	2.9
Private, not-for-profit 4-year						
Nondoctorate-granting	1.2	24.8	27.2	20.0	26.9	2.8
Doctorate-granting	2.9	24.5	23.6	22.1	26.9	2.8
Other	2.6	22.8	24.8	23.2	26.6	2.8

Table I.3—Percentage distribution of 1992–93 bachelor's degree recipients according to the number of jobs held since graduation and the average number of jobs, by selected characteristics —Continued

	Number of jobs					Average
	None	One job	Two jobs	Three jobs	Four jobs	number of jobs
Total undergraduate debt[1]						
Did not borrow	1.9	23.6	26.2	21.3	27.1	2.8
Borrowed, total	1.2	21.1	26.8	21.4	29.5	2.9
Less than $1,000	1.8	21.8	19.7	14.8	41.9	3.1
$1,000–4,999	0.8	24.0	28.4	20.9	26.0	2.8
$5,000–9,999	1.5	21.3	27.7	22.0	27.6	2.9
$10,000–19,999	1.2	18.3	26.3	21.8	32.5	3.0
$20,000 or more	2.4	22.8	21.0	21.9	31.8	3.0
Baccalaureate degree major						
Professional fields	1.0	26.5	27.9	21.9	22.8	2.6
Business and management	0.6	26.5	30.7	22.5	19.8	2.5
Education	1.3	19.9	21.3	22.6	34.9	3.2
Engineering	1.1	34.6	31.5	20.7	12.2	2.2
Health professions	1.9	32.0	28.5	19.8	17.8	2.4
Public affairs/social services	0.6	23.9	26.9	21.8	26.8	2.8
Arts and sciences	2.7	18.5	24.7	20.2	34.0	3.1
Biological sciences	4.7	24.5	26.7	16.9	27.2	2.7
Mathematics and other sciences	3.0	26.1	27.7	18.0	25.3	2.7
Social science	1.4	17.5	23.8	22.0	35.3	3.1
History	0.5	14.2	28.2	20.4	36.8	3.4
Humanities	2.1	11.6	23.1	21.4	41.9	3.5
Psychology	5.3	20.2	21.6	20.8	32.1	3.1
Other	1.4	18.2	24.7	22.0	33.7	3.1
Highest degree attained by 1997						
Bachelor's degree	1.5	23.5	26.6	21.1	27.2	2.8
Postbaccalaureate certificate	1.4	19.0	25.4	25.7	28.6	3.0
Master's degree	1.3	17.0	25.8	20.3	35.6	3.2
First-professional degree	5.6	17.7	20.7	26.5	29.5	3.0
Doctoral degree	—	—	—	—	—	—
Employment status in April 1997						
Full-time	0.0[2]	22.7	27.1	22.3	27.9	2.8
Part-time	0	16.6	22.0	20.2	41.3	3.4
Unemployed	4.4	20.6	20.0	24.9	30.1	3.0
Out of the labor force	15.1	27.8	24.2	14.7	18.3	2.5

Table 1.3—Percentage distribution of 1992–93 bachelor's degree recipients according to the number of jobs held since graduation and the average number of jobs, by selected characteristics —Continued

	Number of jobs					Average
	None	One job	Two jobs	Three jobs	Four jobs	number of jobs
April 1997 occupation						
Business and management	0	25.0	31.4	22.8	20.9	2.6
Educator	0.1	17.1	24.3	19.9	38.6	3.2
Engineering	0	32.6	26.7	21.0	19.7	2.4
Health professions	0.3	27.5	25.3	23.1	23.8	2.7
Other professions	0	17.7	23.1	23.5	35.7	3.1
Computer science, programming	0	24.9	27.3	22.0	25.7	2.7
Noncomputer technician	0	20.9	30.9	22.8	25.5	2.7
Administrative, clerical, support	0.1	21.9	24.8	24.2	29.0	2.9
Mechanic, operator, laborer	0	24.9	30.1	16.1	28.9	2.8
Sales	0.1	20.1	28.0	22.1	29.6	2.9
Service	0	17.5	21.6	23.5	37.5	3.2
Military, protective services	0	30.8	33.0	19.9	16.4	2.3
Other, uncodeable	0	9.2	26.1	21.1	43.7	3.4
Enrollment/employment status in April 1994						
Full-time enrolled, employed	0	9.9	21.6	27.3	41.2	3.5
Full-time enrolled, not employed	9.1	24.2	24.4	18.1	24.2	2.7
Part-time enrolled	2.0	25.9	21.4	24.0	26.7	2.8
Not enrolled, employed	0	23.2	27.4	21.5	27.9	2.8
Not enrolled, not employed	14.4	22.8	25.2	14.2	23.5	2.8

—Too few cases for a reliable estimate.

[1]Federal loan programs only.

[2]Percentages less than 0.05 appear as 0.0 when rounded.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table I.4—Percentage distribution of 1992–93 bachelor's degree recipients who were employed in April 1997 according to their reported occupation, by selected characteristics

	Business and management	Educator	Engineering	Health professions	Other professions	Computer science, programming	Noncomputer technician	Administrative, clerical, support	Mechanic, operator, laborer	Sales	Service	Military, protective services	All others
Total	20.9	16.2	5.1	7.8	11.1	5.0	0.8	13.6	5.6	8.1	2.9	2.4	0.7
Gender													
Male	22.4	8.9	8.9	4.1	11.6	7.2	1.1	9.9	8.4	10.2	2.7	4.2	0.7
Female	19.6	22.4	2.0	10.8	10.6	3.1	0.6	16.7	3.3	6.3	3.0	0.8	0.7
Race–ethnicity													
American Indian/Alaskan Native	8.5	28.1	1.1	13.7	10.9	10.9	0	18.6	2.1	4.4	0	1.7	0
Asian/Pacific Islander	22.0	7.0	8.6	7.5	12.1	11.4	1.2	13.8	3.6	8.8	2.5	0.9	0.7
Black, non-Hispanic	21.0	15.9	1.7	8.7	11.9	6.4	0.7	15.9	4.5	4.3	5.3	2.2	1.5
Hispanic	22.3	19.0	4.2	7.0	14.5	2.9	1.0	14.4	2.4	5.9	2.1	3.9	0.5
White, non-Hispanic	20.8	16.4	5.3	7.7	10.8	4.7	0.8	13.3	5.9	8.5	2.8	2.4	0.6
Parents' educational attainment													
Less than high school	22.7	19.9	1.6	10.0	9.2	6.3	0.2	14.9	3.3	4.5	3.4	4.2	0
High school or equivalency	20.4	17.4	4.9	8.6	10.3	4.2	0.4	14.2	6.0	7.9	2.3	2.6	0.9
Some postsecondary education	20.2	15.6	5.3	7.5	10.6	4.6	0.7	16.4	5.9	6.7	3.5	2.3	0.9
Bachelor's degree	21.0	14.3	6.5	7.6	11.1	5.9	1.1	11.8	6.1	9.3	2.9	1.7	0.7
Advanced degree	20.6	16.1	5.0	7.0	12.5	5.3	1.2	12.4	5.1	9.0	3.1	2.3	0.5
Marital status in 1997													
Never married	22.1	13.1	5.2	5.7	12.8	5.4	0.9	14.1	5.2	8.9	3.7	2.1	0.7
Married/cohabit as married	20.1	18.6	5.4	9.0	9.3	4.7	0.8	13.3	5.8	7.7	2.2	2.4	0.8
Divorced/separated/widowed	18.5	18.4	2.6	11.9	14.0	4.1	0.7	11.8	7.4	5.2	1.8	3.8	0
Number of children in 1997													
No children	21.5	15.1	5.6	6.6	11.7	5.3	0.9	13.6	5.2	8.6	3.2	2.1	0.7
One	19.4	18.3	3.8	9.3	10.1	4.1	1.1	15.0	6.0	7.6	1.7	2.9	1.0
Two or more children	19.1	20.5	3.6	12.3	8.9	3.8	0.4	12.0	7.8	5.3	2.2	3.5	0.7

Table I.4—Percentage distribution of 1992–93 bachelor's degree recipients who were employed in April 1997 according to their reported occupation, by selected characteristics—Continued

	Business and management	Educator	Engineering	Health professions	Other professions	Computer science, programming	Noncomputer technician	Administrative, clerical, support	Mechanic, operator, laborer	Sales	Service	Military, protective services	All others
Age received bachelor's degree													
22 or younger	21.9	16.9	4.1	5.5	12.9	4.6	0.9	14.6	4.6	8.4	2.9	1.8	0.8
23–24	19.9	14.6	7.2	7.6	10.0	5.5	1.3	10.9	6.2	10.4	3.0	3.0	0.7
25–29	19.9	14.1	7.1	9.9	9.0	5.9	0.3	13.5	5.7	7.4	3.5	3.2	0.7
30 or older	20.2	18.3	3.6	12.4	8.9	4.7	0.4	15.0	7.4	4.2	2.0	2.4	0.5
Degree-granting institution (undergraduate)													
Public 4-year													
Nondoctorate-granting	20.9	23.2	2.9	7.0	8.9	4.0	0.5	13.2	5.2	7.7	2.9	3.2	0.5
Doctorate-granting	20.5	14.2	7.3	8.5	10.7	5.7	1.0	12.4	5.1	9.0	3.1	1.8	0.8
Private, not-for-profit 4-year													
Nondoctorate-granting	21.1	14.9	1.9	7.7	10.1	5.3	0.6	17.1	7.6	7.2	2.7	2.9	0.8
Doctorate-granting	22.8	13.0	6.2	5.8	16.3	4.4	0.9	11.7	5.5	8.2	2.2	2.3	0.7
Other	17.1	11.1	7.7	10.6	16.8	3.3	2.1	20.2	4.4	2.6	2.7	1.0	0.4
Total undergraduate debt[1]													
Did not borrow[2]	22.9	15.5	4.9	7.3	10.8	4.6	0.9	13.1	5.7	8.8	2.6	2.3	0.7
Borrowed, total[2]	18.2	17.1	5.5	8.0	11.5	5.5	0.6	14.0	5.7	7.4	3.3	2.5	0.8
Less than $1,000	23.6	17.8	8.0	10.3	9.3	3.0	0.4	9.1	7.6	6.6	3.7	0	0.6
$1,000–4,999	19.1	16.6	6.0	5.9	11.9	5.4	0.7	14.9	5.2	6.6	3.7	3.6	0.4
$5,000–9,999	18.0	18.7	4.3	7.8	10.1	6.2	0.7	15.7	5.4	7.1	2.9	2.4	0.6
$10,000–19,999	17.2	16.2	5.3	8.7	12.4	5.5	0.5	13.2	6.0	8.6	3.2	2.0	1.3
$20,000 or more	16.5	16.3	9.0	15.7	12.8	4.9	0	7.6	7.2	5.7	3.7	0.7	0

Table I.4—Percentage distribution of 1992–93 bachelor's degree recipients who were employed in April 1997 according to their reported occupation, by selected characteristics—Continued

	Business and management	Educator	Engineering	Health professions	Other professions	Computer science, programming	Noncomputer technician	Administrative, clerical, support	Mechanic, operator, laborer	Sales	Service	Military, protective services	All others
Baccalaureate degree major													
Professional fields	22.5	17.6	7.4	10.3	6.2	4.0	0.5	12.3	4.9	8.4	2.4	2.7	0.6
Business and management	39.2	2.6	1.7	1.6	4.3	5.3	0.3	19.4	6.7	13.8	2.9	1.7	0.7
Education	6.6	64.6	0.5	3.3	5.5	0.6	0.2	8.1	2.9	3.0	2.7	1.6	0.5
Engineering	5.7	1.5	49.9	0.1	9.1	11.2	1.1	2.2	6.0	9.6	1.5	2.0	0.2
Health professions	16.6	3.2	4.1	62.6	2.5	1.4	1.1	3.5	1.4	1.5	0.7	0.5	0.9
Public affairs/social services	11.5	4.8	0	5.5	25.3	1.0	0.3	17.5	5.1	3.9	3.7	20.9	0.6
Arts and sciences	18.2	15.4	2.3	4.9	16.7	7.6	1.2	14.6	6.4	6.8	3.0	1.9	1.0
Biological sciences	11.4	17.5	2.6	15.0	14.4	3.3	6.0	9.2	7.5	5.3	3.0	1.7	3.1
Mathematics and other sciences	11.4	16.4	6.4	3.8	10.0	25.2	1.9	11.6	7.8	3.6	0.6	1.4	0.1
Social science	26.5	9.4	1.1	2.9	15.1	2.5	0.3	17.6	7.0	8.6	4.2	3.1	1.5
History	16.7	35.3	0.5	4.0	7.0	2.9	2.0	10.5	3.1	12.3	3.0	2.6	0.3
Humanities	16.5	17.0	1.7	3.3	22.5	5.4	0.3	16.2	5.8	6.2	3.8	0.8	0.7
Psychology	18.1	14.2	0.4	8.0	26.4	2.5	0	14.5	4.3	7.0	2.0	1.9	0.7
Other	20.1	12.2	2.2	3.9	18.0	3.0	1.4	16.3	6.9	9.5	4.2	1.9	0.4
Highest degree attained by 1997													
Bachelor's degree	21.8	15.0	5.1	7.6	9.8	5.2	0.8	14.1	5.8	8.8	3.0	2.4	0.7
Postbaccalaureate certificate	19.3	31.1	2.9	7.6	7.4	5.5	0.9	11.4	3.2	3.3	3.6	3.6	0.2
Master's degree	15.1	24.2	7.2	9.0	15.6	3.6	1.1	11.1	5.2	3.4	2.0	1.6	1.2
First-professional degree	3.9	2.4	2.0	5.3	75.8	0.9	0	5.9	0	1.9	0	2.1	0
Doctoral degree	—	—	—	—	—	—	—	—	—	—	—	—	—
Employment status in April 1997													
Full-time	21.5	15.7	5.4	7.2	11.1	5.3	0.8	13.1	5.6	8.4	2.7	2.5	0.7
Part-time	12.2	22.4	1.3	14.7	10.6	1.0	1.2	20.7	5.7	4.1	5.1	0.8	0.4

Table I.4—Percentage distribution of 1992–93 bachelor's degree recipients who were employed in April 1997 according to their reported occupation, by selected characteristics—Continued

	Business and management	Educator	Engineering	Health professions	Other professions	Computer science, programming	Noncomputer technician	Administrative, clerical, support	Mechanic, operator, laborer	Sales	Service	Military, protective services	All others
Enrollment/employment status in April 1994													
Full-time enrolled, employed	16.0	23.4	5.6	9.0	20.4	3.1	0.9	11.4	3.1	2.8	1.6	2.1	0.6
Full-time enrolled, not employed	9.2	18.7	8.3	11.0	26.3	3.3	3.0	9.0	6.4	2.8	0.6	0.5	1.0
Part-time enrolled	20.6	24.8	4.0	8.0	8.4	4.2	0.8	12.8	4.1	6.4	3.4	2.2	0.5
Not enrolled, employed	22.1	15.0	5.1	7.5	9.7	5.3	0.7	13.7	5.8	9.0	3.0	2.4	0.7
Not enrolled, not employed	17.0	15.1	3.7	6.3	12.5	5.0	1.6	19.1	6.0	5.6	3.1	3.4	1.8

—Too few cases for a reliable estimate.

[1]Federal loan programs only.

[2]Values for totals may not be within range of subgroup values due to missing cases in subgroup variables.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table I.5—Percentage distribution according to annual salaries, and average annual salaries, for 1992–93 bachelor's degree recipients employed full time in April 1997, by selected characteristics

	Full-time salary distribution								Average annual salary[1]
	Less than $10,000	$10,000–14,999	$15,000–19,999	$20,000–24,999	$25,000–34,999	$35,000–49,999	$50,000–74,999	$75,000 or more	
Total	1.6	3.7	8.3	14.2	33.2	25.8	10.4	3.0	$34,252
Gender									
Male	1.4	2.8	5.7	10.8	28.3	31.0	14.8	5.2	38,430
Female	1.8	4.4	10.5	17.2	37.4	21.2	6.5	0.9	30,578
Race–ethnicity									
American Indian/Alaskan Native	0	3.1	0	24.8	25.4	30.9	13.3	2.5	36,493
Asian/Pacific Islander	1.3	1.9	1.5	7.7	34.6	34.1	14.4	4.5	39,924
Black, non-Hispanic	1.5	5.3	10.4	14.0	38.1	19.3	10.1	1.2	31,449
Hispanic	3.6	7.0	7.7	10.6	31.3	27.4	9.5	3.0	33,149
White, non-Hispanic	1.5	3.4	8.5	14.7	32.9	25.8	10.2	3.0	34,212
Parents' educational attainment									
Less than high school	2.4	4.8	10.6	7.8	32.7	26.8	11.1	3.9	34,996
High school or equivalency	1.4	3.8	9.5	13.5	33.5	24.9	10.6	2.8	33,908
Some postsecondary education	2.2	3.4	9.0	15.8	32.5	25.2	9.6	2.3	33,492
Bachelor's degree	1.2	3.5	6.9	15.4	32.1	27.2	10.4	3.4	34,630
Advanced degree	1.4	3.8	7.5	13.8	35.1	25.3	10.1	3.0	34,546
Marital status in 1997									
Never married	1.8	3.9	8.9	13.8	34.5	25.8	8.7	2.5	33,210
Married/cohabit as married	1.5	3.5	7.7	14.4	32.0	26.1	11.6	3.3	35,090
Divorced/separated/widowed	1.0	4.0	8.5	14.3	33.5	23.1	12.5	3.1	34,903
Number of children in 1997									
No children	1.8	3.7	8.4	13.9	33.7	26.0	9.5	2.9	33,974
One	1.1	4.4	8.8	15.5	32.8	24.4	11.1	1.9	33,309
Two or more children	0.8	2.3	6.9	14.7	30.4	26.0	14.4	4.7	37,024
Age received bachelor's degree									
22 or younger	1.8	3.9	8.9	15.1	35.0	24.9	8.1	2.3	32,791
23–24	1.9	3.7	8.9	13.9	34.0	25.0	9.4	3.2	33,950
25–29	1.1	3.9	7.2	14.1	31.0	28.0	11.3	3.5	35,601
30 or older	1.0	2.8	6.6	12.3	28.4	27.7	17.4	3.9	37,687
Degree-granting institution (undergraduate)									
Public 4-year									
Nondoctorate-granting	1.8	3.8	11.0	16.2	35.9	20.9	7.7	2.6	31,967
Doctorate-granting	1.9	3.2	6.8	14.2	33.7	27.5	10.0	2.8	34,340
Private, not-for-profit 4-year									
Nondoctorate-granting	1.1	5.8	10.7	13.5	29.6	26.1	9.8	3.4	33,858
Doctorate-granting	1.0	2.4	4.8	11.6	30.1	29.0	17.2	4.0	38,806
Other	1.1	1.5	8.8	12.9	38.3	24.5	11.8	1.1	33,840

Table I.5—Percentage distribution according to annual salaries, and average annual salaries, for 1992–93 bachelor's degree recipients employed full time in April 1997, by selected characteristics —Continued

	Full-time salary distribution								Average annual salary[1]
	Less than $10,000	$10,000–14,999	$15,000–19,999	$20,000–24,999	$25,000–34,999	$35,000–49,999	$50,000–74,999	$75,000 or more	
Total undergraduate debt[2]									
Did not borrow	1.9	3.5	6.9	13.7	33.2	26.7	11.4	2.9	$34,752
Borrowed, total	1.3	4.0	10.2	15.1	32.9	24.5	8.9	3.1	33,520
Less than $1,000	2.6	4.8	16.4	22.1	20.7	23.1	7.5	2.9	31,035
$1,000–4,999	2.2	3.9	10.0	14.5	33.6	24.7	8.8	2.3	32,835
$5,000–9,999	0.8	3.7	10.4	15.1	31.5	25.8	10.1	2.6	33,584
$10,000–19,999	1.0	4.3	10.2	15.0	35.0	22.8	8.2	3.5	33,579
$20,000 or more	0.5	3.7	6.0	15.5	29.3	29.3	8.3	7.4	38,616
Baccalaureate degree major									
Professional fields	1.4	2.6	7.7	13.7	30.5	28.9	12.6	2.8	35,525
Business and management	1.1	1.9	5.3	11.9	29.7	32.8	13.1	4.3	37,454
Education	2.6	5.4	16.0	26.6	39.2	6.3	2.7	1.1	26,513
Engineering	1.1	0.7	1.0	1.8	13.2	54.9	24.5	2.9	44,524
Health professions	0.6	1.4	3.8	5.1	29.9	36.5	21.1	1.6	39,421
Public affairs/social services	0.7	3.5	13.6	17.3	38.3	20.2	6.0	0.3	30,563
Arts and sciences	2.0	5.3	7.3	15.8	35.0	23.8	7.6	3.3	32,890
Biological sciences	1.2	7.6	9.2	19.0	37.1	20.7	4.7	0.5	29,331
Mathematics and other sciences	0.5	3.8	4.4	11.5	26.3	35.4	12.2	6.0	38,418
Social science	2.1	5.1	5.0	14.5	34.9	23.3	9.7	5.4	35,536
History	8.3	4.3	7.0	17.6	35.4	22.6	4.0	1.0	28,147
Humanities	1.7	6.4	10.2	17.4	37.9	19.3	5.5	1.6	30,179
Psychology	2.8	4.2	9.9	19.1	40.9	19.2	3.4	0.4	28,197
Other	1.5	4.2	12.9	12.7	39.7	18.0	7.9	3.1	32,208
Highest degree attained by 1997									
Bachelor's degree	1.5	3.8	8.4	14.4	32.4	25.9	10.4	3.1	34,342
Postbaccalaureate certificate	1.4	3.5	13.5	13.7	39.8	21.0	5.4	1.9	31,034
Master's degree	2.8	3.3	5.9	13.5	37.7	25.5	10.2	1.2	33,267
First-professional degree	1.2	0	1.5	5.7	32.2	30.1	21.9	7.5	43,831
Doctoral degree	—	—	—	—	—	—	—	—	—
April 1997 occupation									
Business and management	1.2	1.2	4.0	9.9	32.1	32.7	14.3	4.6	38,244
Educator	2.6	5.1	13.0	23.9	46.9	6.2	1.9	0.4	26,139
Engineering	0.9	1.4	0.5	3.9	13.8	54.5	22.7	2.3	43,178
Health professions	0.9	2.2	6.0	6.7	29.7	34.8	17.6	2.2	38,026
Other professions	3.0	4.1	9.0	15.3	36.4	22.4	7.7	2.0	32,356
Computer science, programming	0.2	0.9	2.4	7.5	28.1	42.0	14.8	4.1	40,680
Noncomputer technician	2.2	14.8	6.0	22.3	42.0	12.7	0	0	26,246
Administrative, clerical, support	1.3	5.9	12.9	19.1	31.7	21.4	5.4	2.3	30,560
Mechanic, operator, laborer	0.8	6.1	13.3	15.0	27.1	20.2	12.0	5.6	34,896
Sales	1.1	2.8	3.8	7.2	28.2	35.3	15.8	5.8	40,023
Service	1.4	10.5	22.1	27.8	26.2	8.8	1.2	2.0	25,562
Military, protective services	0	0.8	9.4	13.7	38.3	24.9	11.1	1.7	34,031
Other, uncodeable	8.1	7.6	5.9	17.5	36.2	17.4	4.0	3.3	29,834

Table I.5—Percentage distribution according to annual salaries, and average annual salaries, for 1992–93 bachelor's degree recipients employed full time in April 1997, by selected characteristics —Continued

	Full-time salary distribution								Average annual salary[1]
	Less than $10,000	$10,000–14,999	$15,000–19,999	$20,000–24,999	$25,000–34,999	$35,000–49,999	$50,000–74,999	$75,000 or more	
Enrollment/employment status in April 1994									
Full-time enrolled, employed	2.4	4.2	9.3	14.8	36.3	24.0	8.6	0.5	$31,836
Full-time enrolled, not employed	1.9	6.0	4.6	10.3	36.9	25.0	12.6	2.7	35,126
Part-time enrolled	1.7	3.8	7.3	15.8	34.9	21.4	12.9	2.4	34,160
Not enrolled, employed	1.5	3.4	7.9	14.1	32.9	26.6	10.5	3.2	34,611
Not enrolled, not employed	2.7	5.7	17.2	16.5	29.4	19.9	5.9	2.8	30,578

—Too few cases for a reliable estimate.

[1]Respondents reporting salaries less than $1,000 were excluded (10 cases unweighted). Respondents reporting salaries greater than $500,000 were reset to $500,000.

[2]Federal loan programs only.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table I.6—Percentage of 1992–93 bachelor's degree recipients who had experienced any unemployment since graduation, the average number of unemployment spells, the average number of months unemployed, and the unemployment rate for April 1997, by selected characteristics

	Any unemployment spells[1]	Average number of unemployment spells[2]	Average total number of months unemployed[2, 3]	Average longest period of unemployment (in months)[2]	Unemployment rate in April 1997
Total	39.8	1.3	7.3	6.5	2.9
Gender					
Male	40.4	1.3	7.4	6.6	2.9
Female	39.4	1.3	7.3	6.4	2.9
Race–ethnicity					
American Indian/Alaskan Native	36.6	—	—	—	2.9
Asian/Pacific Islander	42.8	1.2	8.9	8.2	6.7
Black, non-Hispanic	45.1	1.3	8.5	7.7	4.5
Hispanic	42.0	1.4	10.0	8.8	3.0
White, non-Hispanic	39.2	1.3	6.9	6.1	2.5
Parents' educational attainment					
Less than high school	36.9	1.3	11.2	10.3	4.6
High school or equivalency	40.4	1.3	7.3	6.5	2.1
Some postsecondary education	37.2	1.3	7.4	6.5	2.4
Bachelor's degree	39.5	1.3	6.9	6.1	3.1
Advanced degree	42.2	1.3	7.2	6.3	3.7
Marital status in 1997					
Never married	44.5	1.4	7.8	6.8	3.9
Married/cohabit as married	36.1	1.3	6.8	6.1	2.1
Divorced/separated/widowed	36.4	1.3	7.9	7.1	2.1
Number of children in 1997					
No children	42.0	1.3	7.2	6.4	3.1
One	36.1	1.3	7.4	6.6	2.2
Two or more children	31.5	1.3	8.0	7.3	2.0
Age received bachelor's degree					
22 or younger	42.1	1.3	7.0	6.1	2.9
23–24	41.9	1.3	6.9	6.0	3.2
25–29	39.0	1.4	7.6	6.6	3.7
30 or older	31.1	1.3	9.1	8.2	1.6
Degree-granting institution (undergraduate)					
Public 4-year					
Nondoctorate-granting	40.7	1.3	7.7	6.8	2.6
Doctorate-granting	40.5	1.3	7.1	6.3	2.7
Private, not-for-profit 4-year					
Nondoctorate-granting	38.3	1.3	7.3	6.4	2.7
Doctorate-granting	40.2	1.3	7.3	6.5	4.2
Other	32.6	1.4	8.7	7.7	3.5

Table I.6—Percentage of 1992–93 bachelor's degree recipients who had experienced any unemployment since graduation, the average number of unemployment spells, the average number of months unemployed, and the unemployment rate for April 1997, by selected characteristics—Continued

	Any unemployment spells[1]	Average number of unemployment spells[2]	Average total number of months unemployed[2, 3]	Average longest period of unemployment (in months)[2]	Unemployment rate in April 1997
Total undergraduate debt[4]					
Did not borrow	39.0	1.3	7.5	6.7	3.0
Borrowed, total	41.2	1.3	7.0	6.2	2.7
Less than $1,000	39.3	1.3	7.0	6.1	1.2
$1,000–4,999	37.7	1.3	6.6	5.8	2.3
$5,000–9,999	41.8	1.3	7.6	6.7	3.6
$10,000–19,999	43.0	1.3	6.6	5.8	2.3
$20,000 or more	46.5	1.3	8.7	7.9	2.7
Baccalaureate degree major					
Professional fields	38.0	1.3	7.0	6.3	2.2
Business and management	36.2	1.2	7.1	6.5	2.2
Education	46.8	1.4	6.9	6.0	2.3
Engineering	39.2	1.2	7.5	6.9	1.2
Health professions	27.9	1.2	6.6	6.1	2.8
Public affairs/social services	35.8	1.3	6.8	6.1	2.1
Arts and sciences	41.4	1.4	8.0	7.0	4.2
Biological sciences	39.4	1.4	8.6	7.5	7.2
Mathematics and other sciences	36.3	1.3	8.4	7.5	2.7
Social science	43.7	1.4	7.5	6.5	3.8
History	44.3	1.3	7.5	6.4	3.3
Humanities	43.6	1.4	7.9	6.6	4.4
Psychology	39.2	1.4	9.2	8.4	5.1
Other	43.1	1.4	6.8	5.9	2.5
Highest degree attained by 1997					
Bachelor's degree	38.7	1.3	6.7	5.9	2.5
Postbaccalaureate certificate	48.1	1.4	9.4	8.4	3.4
Master's degree	47.3	1.3	9.7	8.9	4.9
First-professional degree	41.9	1.2	14.9	13.9	11.3
Doctoral degree	—	—	—	—	—
Employment status in April 1997					
Full-time	39.4	1.3	6.5	5.8	(*)
Part-time	40.0	1.3	9.0	8.0	(*)
Unemployed	100.0	1.7	15.9	13.1	100.0
Out of the labor force	27.3	1.2	6.6	6.1	—

Table 1.6—Percentage of 1992–93 bachelor's degree recipients who had experienced any unemployment since graduation, the average number of unemployment spells, the average number of months unemployed, and the unemployment rate for April 1997, by selected characteristics—Continued

	Any unemployment spells[1]	Average number of unemployment spells[2]	Average total number of months unemployed[2, 3]	Average longest period of unemployment (in months)[2]	Unemployment rate in April 1997
April 1997 occupation					
Business and management	35.5	1.2	5.8	5.3	1.5
Educator	49.7	1.4	7.5	6.5	2.8
Engineering	40.8	1.2	6.5	6.1	0.7
Health professions	28.3	1.3	7.6	6.9	3.8
Other professions	43.7	1.3	8.2	7.3	3.9
Computer science, programming	35.7	1.3	6.8	6.2	1.8
Noncomputer technician	35.1	1.3	6.3	5.3	3.4
Administrative, clerical, support	43.5	1.4	7.9	6.8	4.7
Mechanic, operator, laborer	32.7	1.3	7.5	6.7	1.2
Sales	41.2	1.3	5.7	4.9	2.2
Service	49.8	1.4	8.4	7.4	5.6
Military, protective services	32.8	1.2	7.7	7.1	0.8
Other, uncodeable	59.1	1.3	6.3	5.6	5.9
Enrollment/employment status in April 1994					
Full-time enrolled, employed	37.8	1.3	7.4	6.7	3.9
Full-time enrolled, not employed	42.7	1.3	13.8	12.8	7.1
Part-time enrolled	32.2	1.2	7.3	6.5	1.4
Not enrolled, employed	38.4	1.3	5.8	5.1	2.5
Not enrolled, not employed	64.2	1.5	14.0	12.5	5.5

—Too few cases for a reliable estimate.

•Not applicable.

[1]Employment spells were measured in calendar months. The respondent could have been unemployed for a period of almost 8 weeks and still be counted as 1 month.

[2]Only includes respondents who have ever experienced unemployment spells.

[3]Across all spells.

[4]Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

SECTION II—Characteristics of Job

General Job Characteristics

- Among 1992–93 bachelor's degree recipients who were working in April 1997, at least half reported that their job was closely related to their degree or that it had definite career potential (56 percent and 57 percent, respectively). About 7 in 10 reported that their April job incorporated skills they had used or learned in their previous jobs (table II.1).
- Among employed college graduates, 7 percent reported that they had a part-time job and 9 percent that they worked less than 35 hours a week. Women were more likely than men to report having a part-time job (9 percent versus 4 percent) (table II.1).
- Students who had majored in professional fields were more likely to say that their jobs were closely related to their undergraduate field of study (64 percent) than were those majoring in arts and sciences (44 percent). Those majoring in professional fields and the arts and sciences were equally likely to indicate that they had jobs with definite career potential (table II.1).
- Among 1992–93 bachelor's degree recipients who had majored in professional fields, the group most likely to say that their 1997 job was closely related to their degree was those who had majored in health professions (85 percent), followed by those majoring in education (68 percent), engineering (61 percent), public affairs/social services (60 percent), and business and management (58 percent). Among those who had majored in arts and sciences, the percentage indicating that their job was closely related to their degree ranged from 31 percent of those in social sciences, to 49 percent of those in biological sciences, to 66 percent of those in mathematics and other sciences (table II.1).
- Forty-six percent of those employed part time in April 1997 indicated that they preferred to work full time (table II.1).

Employer Benefits

- Most 1992–93 bachelor's degree recipients indicated that they received various benefits from their jobs in 1997. Eighty-eight percent reported receiving health insurance, 87 percent paid vacation, and 86 percent paid sick leave. Slightly fewer (80 percent) were offered retirement benefits by their employers (table II.2).
- 1992–93 bachelor's degree recipients who were employed part time in April 1997 were far less likely than their full-time employed counterparts to receive health insurance (39 percent versus 91 percent), paid sick leave (38 percent versus 89 percent),

paid vacation (41 percent versus 91 percent), and retirement benefits (40 percent versus 83 percent) (table II.2).

Satisfaction With Various Employment Characteristics

- Most 1992–93 bachelor's degree recipients (80 percent) were very satisfied with their co-workers at their 1997 jobs. Six in 10 were very satisfied with their supervisor, and slightly fewer (56 percent) were very satisfied with working conditions at their place of employment (table II.3).
- Respondents who had earned first-professional degrees since graduating from college were more likely than those who had earned master's or bachelor's degrees (75 percent versus 59 and 60 percent, respectively) to say that they were very satisfied with their supervisor at their 1997 job (table II.3).
- The proportion of respondents who indicated that they were very satisfied with working conditions at their 1997 jobs ranged from about 4 in 10 for those in military or protective services occupations to about two-thirds for those in engineering occupations (table II.3).

Satisfaction With Current Opportunities and Compensation

- With respect to their 1997 jobs, respondents who had earned their bachelor's degrees in 1992–93 were most likely to say that they were very satisfied with job security (64 percent), followed by job challenge (58 percent), fringe benefits (55 percent), and educational benefits (48 percent). About 4 in 10 indicated that they were very satisfied with promotion opportunity, and about 1 in 3 were very satisfied with the pay from their current jobs (table II.4).
- The proportions of respondents who were very satisfied with their job security varied among members of different racial–ethnic groups. Black, non-Hispanics (49 percent) were less likely than Asian/Pacific Islanders (63 percent), white, non-Hispanics (65 percent), or Hispanics (67 percent) to indicate that they were very satisfied with this aspect of their job (table II.4).
- Males were more likely than females to indicate that they were very satisfied with opportunities for promotion at their jobs (42 percent versus 36 percent) (table II.4).
- Respondents who had majored in professional fields were more likely than those who had majored in arts and sciences to indicate that they were very satisfied with the job challenge at their current jobs (60 percent versus 55 percent) (table II.4).
- The percentage of respondents saying that they were very satisfied with the pay their 1997 jobs offered them ranged from 24 percent for those in service occupations to 44 percent for those in engineering jobs (table II.4).
- The 1992–93 bachelor's degree recipients who worked part time in April 1997 were less likely than their counterparts working full time to be very satisfied with job security (52 percent versus 65 percent) and fringe benefits (30 percent versus 57 percent).

However, there was no significant difference between the two groups with respect to their satisfaction with pay (33 percent each) (table II.4).

Reasons for Taking Current Job

- About one in five 1992–93 bachelor's degree recipients indicated that they took their 1997 job because it was related to their field of study or because it was interesting work. Fewer indicated that they took their current position because it was intellectual work (9 percent) or because they had previous work experience in that field (8 percent) (table II.5).
- Females were more likely than males to say that they had taken their current position because it was related to their field of study (22 percent versus 16 percent) (table II.5).
- Respondents who had earned master's degrees or postbaccalaureate certificates (28 percent each) were more likely than those who had not pursued graduate education (17 percent) to say that they took their current job because it was related to their field of study. While it also appears that students who had earned first-professional degrees were more likely than those who had not pursued graduate education to indicate this as a reason for taking their job, there was not enough statistical evidence to make this conclusion (table II.5).

Financial Reasons for Taking Current Job

- Sixteen percent of 1992–93 bachelor's degree recipients said that they took their job because it was a better advancement opportunity for them. About 1 in 10 took their job because it provided a good income to start or had good income potential, while 5 percent said that they chose the job because it provided good job security (table II.6).
- Males were more likely than females to indicate that they took their current positions for a variety of financial reasons: that the job provided a better advancement opportunity (18 percent versus 14 percent), good income to start (13 percent versus 10 percent), or good income potential (13 percent versus 8 percent). Males and females were equally likely to indicate that they took their current job because it offered good job security (table II.6).
- Graduates who were working full time in April 1997 were more likely than those working part time to indicate that they took their current position because of better advancement opportunities (17 percent versus 7 percent) and good income potential (11 percent versus 2 percent) (table II 6).

How Respondents Found Jobs

- Roughly one-third of 1992–93 bachelor's degree recipients indicated that they had found their 1997 jobs through referrals. About one-fifth said that they had found their jobs through want ads, and fewer (8 percent) said that they had found their current employment through an employment agency (table II.7).

Table II.1—Percentage of employed[1] 1992–93 bachelor's degree recipients who reported various job characteristics for primary job held in April 1997, by selected characteristics

	Closely related to degree	Has definite career potential	April job has built on skills from previous job(s)	Works fewer than 35 hours a week	Is a part-time job	Part-time, full-time preferred
Total	56.0	57.3	69.2	8.9	6.9	4.6
Gender						
Male	51.4	60.6	68.4	5.2	4.1	3.0
Female	59.9	54.5	69.9	12.0	9.3	5.9
Race–ethnicity						
American Indian/Alaskan Native	45.1	67.6	70.6	18.8	17.5	—
Asian/Pacific Islander	53.6	58.1	69.7	8.3	7.6	—
Black, non-Hispanic	49.5	46.8	72.9	6.4	3.6	0
Hispanic	57.6	54.1	65.3	11.5	9.4	13.2
White, non-Hispanic	56.6	58.3	69.0	8.9	6.9	4.0
Parents' educational attainment						
Less than high school	57.1	54.1	66.1	12.4	6.9	—
High school or equivalency	58.0	56.2	68.0	8.6	7.4	5.5
Some postsecondary education	55.8	56.3	68.9	8.3	5.9	5.6
Bachelor's degree	55.1	58.9	70.4	7.1	5.8	2.4
Advanced degree	54.7	57.7	69.4	10.2	8.3	2.9
Marital status in 1997						
Never married	50.9	55.6	68.5	7.2	5.2	4.0
Married/cohabit as married	59.9	59.6	69.7	10.2	8.3	5.2
Divorced/separated/widowed	58.9	50.6	70.8	9.5	6.9	4.8
Number of children in 1997						
No children	53.8	58.0	69.1	7.2	5.4	4.2
One	59.3	54.2	71.0	13.1	11.2	2.3
Two or more children	65.9	56.9	67.7	14.1	11.2	11.8
Age received bachelor's degree						
22 or younger	53.9	59.5	67.8	6.9	5.1	3.4
23–24	54.2	58.4	67.7	8.9	6.4	2.8
25–29	55.5	54.4	69.3	9.3	7.8	9.6
30 or older	64.3	52.4	74.7	13.9	11.7	8.6
Degree-granting institution (undergraduate)						
Public 4-year						
Nondoctorate-granting	56.8	55.9	70.3	10.5	7.6	5.6
Doctorate-granting	57.1	58.7	68.7	8.2	6.7	4.6
Private, not-for-profit 4-year						
Nondoctorate-granting	54.6	53.9	69.9	9.7	7.4	4.5
Doctorate-granting	52.8	59.2	67.2	7.1	5.8	2.9
Other	56.8	61.5	71.7	8.2	7.6	—

Table II.1—Percentage of employed[1] 1992–93 bachelor's degree recipients who reported various job characteristics for primary job held in April 1997, by selected characteristics—Continued

	Closely related to degree	Has definite career potential	April job has built on skills from previous job(s)	Works fewer than 35 hours a week	Is a part-time job	Part-time, full-time preferred
Total undergraduate debt[2]						
Did not borrow	55.1	58.7	68.8	8.9	6.8	3.0
Borrowed, total	56.7	54.9	69.5	8.7	6.9	7.2
Less than $1,000	56.6	48.4	79.9	11.5	7.9	—
$1,000–4,999	56.5	55.2	70.5	8.8	6.3	3.8
$5,000–9,999	55.5	53.7	68.6	10.5	8.3	12.6
$10,000–19,999	57.0	56.5	68.1	7.0	6.4	4.4
$20,000 or more	63.1	53.7	72.4	6.9	4.7	—
Baccalaureate degree major						
Professional fields	64.3	57.5	68.2	8.0	6.1	5.1
Business and management	57.6	60.0	69.7	4.9	3.4	4.2
Education	67.7	51.4	63.5	13.4	9.6	7.1
Engineering	61.2	65.0	62.3	2.0	2.2	—
Health professions	85.0	58.4	78.0	14.8	12.0	2.1
Public affairs/social services	59.6	47.1	66.3	6.7	7.1	—
Arts and sciences	43.6	56.2	69.4	10.2	8.3	4.3
Biological sciences	49.0	50.1	68.5	11.8	8.1	—
Mathematics and other sciences	65.6	64.6	65.4	3.8	5.3	—
Social science	31.2	58.2	70.1	8.0	6.2	1.7
History	34.6	55.8	64.9	16.0	6.8	—
Humanities	41.0	52.2	71.2	15.4	13.3	9.6
Psychology	46.3	50.6	73.6	10.7	7.9	—
Other	50.1	59.0	72.7	9.3	7.1	3.6
Highest degree attained by 1997						
Bachelor's degree	54.0	57.2	68.8	8.6	6.7	4.5
Postbaccalaureate certificate	61.1	51.7	71.6	9.4	7.4	—
Master's degree	69.8	58.6	72.4	11.7	8.6	4.2
First-professional degree	79.3	69.4	66.7	7.9	8.1	—
Doctoral degree	—	—	—	—	—	—
Employment status in April 1997						
Full-time	56.6	58.9	69.6	3.2	0	0.3
Part-time	48.5	36.2	64.0	86.8	100.0	45.6

Table II.1—Percentage of employed[1] 1992–93 bachelor's degree recipients who reported various job characteristics for primary job held in April 1997, by selected characteristics—Continued

	Closely related to degree	Has definite career potential	April job has built on skills from previous job(s)	Works fewer than 35 hours a week	Is a part-time job	Part-time, full-time preferred
April 1997 occupation						
Business and management	54.5	63.4	72.2	5.1	4.0	1.9
Educator	76.7	53.8	65.9	14.5	9.4	8.1
Engineering	67.6	68.0	66.4	1.7	1.7	—
Health professions	80.4	56.4	74.3	16.8	13.0	3.9
Other professions	60.4	58.8	74.3	8.9	6.5	2.4
Computer science, programming	49.9	66.4	72.3	1.5	1.4	—
Noncomputer technician	59.7	46.9	70.0	6.0	9.9	—
Administrative, clerical, support	37.8	45.7	64.6	11.0	10.4	7.7
Mechanic, operator, laborer	40.3	52.2	65.8	7.7	6.9	—
Sales	40.8	64.8	69.7	5.1	3.4	5.6
Service	27.3	39.9	70.4	18.2	12.3	5.0
Military, protective services	48.1	61.2	56.3	2.6	2.2	—
Other, uncodeable	37.4	59.1	76.4	6.7	3.8	—

—Too few cases for a reliable estimate.

[1]Includes all respondents who were employed and not enrolled full time as of April 1997.

[2]Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1997 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table II.2—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who received health insurance, sick leave, vacation, and retirement benefits, by selected characteristics

	Health insurance	Paid sick leave	Paid vacation	Retirement benefits
Total	87.6	85.3	87.2	80.0
Gender				
Male	88.9	84.8	88.7	80.1
Female	86.5	85.7	85.9	80.0
Race–ethnicity				
American Indian/Alaskan Native	73.5	75.5	71.3	70.7
Asian/Pacific Islander	90.8	90.5	92.5	82.8
Black, non-Hispanic	92.8	90.0	92.0	86.8
Hispanic	86.6	88.1	85.4	82.2
White, non-Hispanic	87.2	84.5	86.8	79.3
Parents' educational attainment				
Less than high school	85.2	84.5	86.9	83.4
High school or equivalency	88.0	85.9	87.8	80.4
Some postsecondary education	88.8	85.9	88.7	81.1
Bachelor's degree	89.2	85.6	88.0	81.0
Advanced degree	84.9	84.5	85.0	77.2
Marital status in 1997				
Never married	87.2	83.6	86.7	78.2
Married/cohabit as married	88.0	86.6	87.6	81.6
Divorced/separated/widowed	87.9	86.8	87.7	80.5
Number of children in 1997				
No children	87.6	85.1	87.8	79.4
One	87.7	86.7	85.4	80.0
Two or more children	87.2	84.8	85.9	83.4
Age received bachelor's degree				
22 or younger	89.0	87.2	88.8	80.1
23–24	87.2	84.0	86.2	78.8
25–29	86.3	81.5	87.1	79.4
30 or older	85.3	84.8	84.6	82.0
Degree-granting institution (undergraduate)				
Public 4-year				
Nondoctorate-granting	86.6	85.2	86.7	80.3
Doctorate-granting	88.4	86.3	87.4	80.8
Private, not-for-profit 4-year				
Nondoctorate-granting	87.0	82.7	86.4	77.7
Doctorate-granting	86.7	84.5	87.8	79.1
Other	91.8	89.1	90.8	85.3

Table II.2—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who received health insurance, sick leave, vacation, and retirement benefits, by selected characteristics—Continued

	Health insurance	Paid sick leave	Paid vacation	Retirement benefits
Total undergraduate debt*				
Did not borrow	88.2	85.6	87.2	80.0
Borrowed, total	86.6	84.6	87.2	79.9
Less than $1,000	85.9	87.4	93.8	77.7
$1,000–4,999	84.8	84.1	86.5	78.6
$5,000–9,999	86.8	83.6	85.2	80.3
$10,000–19,999	88.4	85.2	88.5	81.4
$20,000 or more	84.8	87.8	88.8	75.9
Baccalaureate degree major				
Professional fields	89.8	86.8	89.0	83.3
Business and management	90.4	86.4	92.2	82.7
Education	86.1	86.6	79.0	81.0
Engineering	94.2	86.1	95.2	88.7
Health professions	89.7	88.3	90.4	83.6
Public affairs/social services	91.1	89.1	90.1	85.8
Arts and sciences	84.5	83.5	84.9	75.2
Biological sciences	78.7	80.8	81.4	70.9
Mathematics and other sciences	91.5	88.9	87.9	84.7
Social science	87.4	86.2	87.1	76.9
History	85.0	83.9	82.9	67.0
Humanities	77.8	77.5	80.6	69.0
Psychology	85.5	84.0	88.5	77.7
Other	85.9	82.9	85.1	77.5
Highest degree attained by 1997				
Bachelor's degree	88.1	85.3	87.6	80.0
Postbaccalaureate certificate	84.9	83.7	82.0	82.2
Master's degree	85.8	87.0	86.1	81.3
First-professional degree	74.1	76.6	80.3	63.8
Doctoral degree	—	—	—	—
Employment status in April 1997				
Full-time	91.2	88.8	90.7	83.0
Part-time	39.1	38.0	41.0	40.3

Table II.2—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who received health insurance, sick leave, vacation, and retirement benefits, by selected characteristics—Continued

	Health insurance	Paid sick leave	Paid vacation	Retirement benefits
April 1997 occupation				
Business and management	92.2	88.8	93.6	82.9
Educator	87.0	89.9	76.5	84.8
Engineering	95.5	91.3	98.4	90.1
Health professions	84.8	85.4	86.2	80.2
Other professions	83.7	82.1	85.2	73.9
Computer science, programming	94.9	93.0	95.7	89.9
Noncomputer technician	89.3	82.3	84.3	70.7
Administrative, clerical, support	85.3	82.9	87.2	74.4
Mechanic, operator, laborer	78.4	68.9	80.2	65.8
Sales	89.1	82.9	89.2	80.9
Service	73.8	67.6	79.6	65.7
Military, protective services	96.2	95.4	97.4	96.7
Other, uncodeable	81.5	76.3	84.3	72.4

—Too few cases for a reliable estimate.

*Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table II.3—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who were very satisfied with various aspects of their work environment, by selected characteristics

	Very satisfied with:		
	Co-workers	Supervisor	Working conditions
Total	79.9	60.3	55.9
Gender			
Male	79.8	61.0	56.2
Female	79.9	59.7	55.6
Race–ethnicity			
American Indian/Alaskan Native	77.5	64.1	62.0
Asian/Pacific Islander	76.0	62.1	53.1
Black, non-Hispanic	71.0	48.5	42.2
Hispanic	79.8	56.9	55.2
White, non-Hispanic	80.7	61.2	57.1
Parents' educational attainment			
Less than high school	78.4	54.0	56.4
High school or equivalency	80.2	61.8	56.2
Some postsecondary education	79.1	60.7	52.6
Bachelor's degree	80.5	59.7	56.7
Advanced degree	80.5	59.4	57.9
Marital status in 1997			
Never married	79.0	59.5	55.6
Married/cohabit as married	80.8	61.3	56.6
Divorced/separated/widowed	78.7	57.3	53.0
Number of children in 1997			
No children	80.0	60.4	56.4
One	81.6	62.5	56.0
Two or more children	77.2	57.1	52.6
Age received bachelor's degree			
22 or younger	80.8	61.5	56.7
23–24	81.3	61.8	58.6
25–29	78.0	58.1	51.0
30 or older	76.4	56.2	53.7
Degree-granting institution (undergraduate)			
Public 4-year			
Nondoctorate-granting	79.8	61.3	54.6
Doctorate-granting	79.9	58.8	56.8
Private, not-for-profit 4-year			
Nondoctorate-granting	78.2	59.8	54.0
Doctorate-granting	81.8	62.2	55.8
Other	82.5	65.9	63.9

Table II.3—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who were very satisfied with various aspects of their work environment, by selected characteristics—Continued

	Very satisfied with:		
	Co-workers	Supervisor	Working conditions
Total undergraduate debt*			
Did not borrow	80.8	61.2	57.4
Borrowed, total	78.5	58.9	53.6
Less than $1,000	75.1	63.4	57.7
$1,000–4,999	80.3	59.8	52.5
$5,000–9,999	76.4	57.5	51.9
$10,000–19,999	79.3	60.5	55.6
$20,000 or more	76.7	48.6	53.4
Baccalaureate degree major			
Professional fields	80.9	60.0	54.9
Business and management	81.4	59.3	57.9
Education	81.2	62.9	54.5
Engineering	84.1	63.0	56.9
Health professions	77.4	53.4	47.4
Public affairs/social services	78.4	61.4	47.7
Arts and sciences	77.8	60.4	56.5
Biological sciences	74.9	58.2	55.4
Mathematics and other sciences	77.0	63.5	59.8
Social science	76.3	60.9	55.8
History	75.0	60.7	54.4
Humanities	79.1	59.9	56.7
Psychology	84.6	56.9	54.6
Other	80.3	61.0	58.3
Highest degree attained by 1997			
Bachelor's degree	79.8	60.2	55.8
Postbaccalaureate certificate	78.8	59.8	58.5
Master's degree	79.6	59.3	55.6
First-professional degree	87.6	74.7	59.2
Doctoral degree	—	—	—
Employment status in April 1997			
Full-time	79.9	59.9	55.9
Part-time	79.3	64.8	55.9

Table II.3—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who were very satisfied with various aspects of their work environment, by selected characteristics—Continued

	Very satisfied with:		
	Co-workers	Supervisor	Working conditions
April 1997 occupation			
Business and management	80.9	61.2	58.3
Educator	77.7	61.9	53.0
Engineering	82.9	63.6	66.0
Health professions	76.5	54.3	49.2
Other professions	81.3	60.1	57.3
Computer science, programming	79.4	60.9	64.9
Noncomputer technician	84.5	60.3	58.9
Administrative, clerical, support	78.5	61.5	56.9
Mechanic, operator, laborer	81.6	60.0	45.3
Sales	83.7	59.5	58.0
Service	78.0	57.9	50.1
Military, protective services	76.2	56.2	41.8
Other, uncodeable	85.5	45.9	74.6

—Too few cases for a reliable estimate.

*Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table II.4—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who were very satisfied with benefits and advancement opportunities, by selected characteristics

	Very satisfied with:					
	Job security	Job challenge	Fringe benefits	Educational benefits	Promotion opportunity	Pay
Total	64.1	57.9	54.9	48.4	38.8	33.3
Gender						
Male	63.5	56.4	54.8	47.4	41.9	34.0
Female	64.6	59.2	54.9	49.2	36.2	32.7
Race–ethnicity						
American Indian/Alaskan Native	55.7	74.4	55.4	60.3	41.7	52.4
Asian/Pacific Islander	63.0	55.4	47.6	44.6	33.5	25.8
Black, non-Hispanic	48.9	45.1	49.2	50.9	29.6	25.0
Hispanic	67.1	61.3	58.8	56.9	41.3	33.3
White, non-Hispanic	65.2	58.7	55.4	47.8	39.7	34.1
Parents' educational attainment						
Less than high school	57.2	57.0	55.2	53.6	32.9	31.5
High school or equivalency	62.8	60.6	54.5	50.7	37.4	35.7
Some postsecondary education	65.0	58.6	55.4	47.8	39.2	30.9
Bachelor's degree	64.7	56.7	55.1	47.4	40.4	33.8
Advanced degree	65.9	56.2	55.2	47.1	39.1	32.5
Marital status in 1997						
Never married	63.3	54.8	55.3	47.0	39.5	31.7
Married/cohabit as married	65.1	60.9	55.1	50.0	38.9	35.2
Divorced/separated/widowed	60.4	55.4	49.0	45.3	33.0	28.5
Number of children in 1997						
No children	65.2	57.4	55.3	47.2	40.0	33.5
One	62.6	58.8	55.5	50.4	37.1	34.0
Two or more children	58.6	60.1	51.0	53.0	34.0	31.2
Age received bachelor's degree						
22 or younger	67.4	58.2	56.4	46.7	40.7	35.3
23–24	67.5	60.1	56.8	48.5	41.5	31.8
25–29	61.2	54.0	51.3	50.0	38.2	32.0
30 or older	52.8	57.1	50.9	51.3	30.5	30.7
Degree-granting institution (undergraduate)						
Public 4-year						
Nondoctorate-granting	63.5	59.4	54.3	49.3	39.3	32.1
Doctorate-granting	65.7	58.9	55.7	48.8	39.3	33.8
Private, not-for-profit 4-year						
Nondoctorate-granting	59.3	53.1	52.5	48.3	34.7	32.9
Doctorate-granting	64.8	56.7	54.8	43.8	40.4	33.8
Other	71.0	65.4	61.5	55.9	45.3	35.2

Table II.4—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who were very satisfied with benefits and advancement opportunities, by selected characteristics—Continued

	Very satisfied with:					
	Job security	Job challenge	Fringe benefits	Educational benefits	Promotion opportunity	Pay
Total undergraduate debt*						
Did not borrow	65.7	58.9	56.3	50.1	40.0	34.2
Borrowed, total	61.7	56.6	52.8	45.9	37.1	32.0
Less than $1,000	69.9	54.9	56.2	57.1	40.9	31.3
$1,000–4,999	61.2	57.1	53.4	47.6	37.0	33.2
$5,000–9,999	58.9	55.2	52.1	43.2	37.4	30.6
$10,000–19,999	64.0	58.0	53.2	46.0	37.4	32.6
$20,000 or more	60.6	53.0	48.3	44.5	30.7	28.9
Baccalaureate degree major						
Professional fields	64.4	59.6	55.5	49.7	39.3	34.5
Business and management	64.3	54.6	58.0	48.7	44.3	34.7
Education	67.1	66.3	50.4	52.6	32.6	27.9
Engineering	61.4	61.0	59.1	51.1	42.5	42.0
Health professions	60.7	63.5	52.3	49.0	32.7	41.2
Public affairs/social services	68.0	57.5	57.5	44.2	37.3	29.5
Arts and sciences	63.8	54.9	53.1	46.5	38.7	31.4
Biological sciences	59.5	52.7	47.9	42.5	32.2	29.0
Mathematics and other sciences	64.5	57.7	61.0	54.9	43.4	38.6
Social science	64.8	54.3	50.6	47.8	41.1	31.9
History	70.6	59.2	45.2	43.5	40.3	28.1
Humanities	62.0	54.0	51.3	42.0	35.9	30.5
Psychology	64.9	53.8	60.1	44.7	35.4	23.6
Other	63.3	58.0	56.1	47.5	37.4	32.6
Highest degree attained by 1997						
Bachelor's degree	64.3	56.8	54.8	48.0	39.0	33.6
Postbaccalaureate certificate	62.7	62.4	52.8	52.9	31.7	28.6
Master's degree	62.4	64.6	56.5	51.3	38.3	31.7
First-professional degree	64.3	75.0	51.8	43.7	50.6	36.6
Doctoral degree	—	—	—	—	—	—
Employment status in April 1997						
Full-time	65.0	58.5	56.6	49.0	39.7	33.3
Part-time	51.6	50.9	30.2	40.6	27.4	32.5

Table II.4—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who were very satisfied with benefits and advancement opportunities, by selected characteristics—Continued

	Very satisfied with:					
	Job security	Job challenge	Fringe benefits	Educational benefits	Promotion opportunity	Pay
April 1997 occupation						
Business and management	68.1	57.8	58.7	48.2	48.0	37.0
Educator	66.9	72.4	50.2	56.8	30.0	25.1
Engineering	67.3	68.7	63.8	58.4	44.3	44.3
Health professions	59.6	63.6	49.8	50.8	31.7	39.6
Other professions	61.2	61.1	56.4	42.8	39.1	30.7
Computer science, programming	64.1	57.3	62.7	52.6	46.8	37.8
Noncomputer technician	55.4	52.7	60.3	68.0	33.9	32.5
Administrative, clerical, support	62.6	45.0	53.8	45.0	34.2	30.9
Mechanic, operator, laborer	59.4	46.2	46.9	38.4	38.5	31.1
Sales	60.3	50.6	54.6	40.7	43.1	37.1
Service	60.8	34.8	43.5	38.6	27.7	24.3
Military, protective services	71.5	63.9	61.7	50.4	40.3	29.3
Other, uncodeable	63.4	57.3	67.3	65.9	38.3	40.1

—Too few cases for a reliable estimate.

*Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table II.5—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated various reasons for taking their current positions that were related to the nature of the work itself, by selected characteristics

	Related to field of study	Was interesting work	Was intellectual work	Had previous work experience
Total	18.8	18.3	9.1	7.7
Gender				
Male	15.5	17.0	8.0	7.0
Female	21.7	19.4	10.0	8.3
Race–ethnicity				
American Indian/Alaskan Native	15.6	13.8	5.3	2.7
Asian/Pacific Islander	19.3	26.2	18.5	5.9
Black, non-Hispanic	14.7	15.2	7.4	8.1
Hispanic	20.8	17.9	7.0	6.9
White, non-Hispanic	19.1	18.3	8.9	7.8
Parents' educational attainment				
Less than high school	16.8	15.4	7.1	7.5
High school or equivalency	18.6	16.7	8.3	8.8
Some postsecondary education	19.2	16.7	8.4	7.0
Bachelor's degree	18.3	20.2	9.9	6.6
Advanced degree	19.5	19.4	9.7	7.7
Marital status in 1997				
Never married	18.3	19.3	10.7	7.5
Married/cohabit as married	19.3	17.7	7.4	7.6
Divorced/separated/widowed	18.0	15.9	12.6	10.3
Number of children in 1997				
No children	19.0	18.8	9.6	7.7
One	17.8	17.0	8.5	7.0
Two or more children	19.3	16.4	6.7	7.8
Age received bachelor's degree				
22 or younger	19.3	19.5	10.1	7.2
23–24	19.9	18.0	7.6	7.6
25–29	16.0	16.1	8.2	8.2
30 or older	18.1	16.8	9.2	8.8
Degree-granting institution (undergraduate)				
Public 4-year				
Nondoctorate-granting	19.6	16.3	7.9	7.3
Doctorate-granting	19.0	17.3	8.6	7.7
Private, not-for-profit 4-year				
Nondoctorate-granting	17.4	18.6	9.3	8.3
Doctorate-granting	18.2	22.7	11.2	6.9
Other	22.5	26.6	15.8	11.1

Table II.5—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated various reasons for taking their current positions that were related to the nature of the work itself, by selected characteristics—Continued

	Related to field of study	Was interesting work	Was intellectual work	Had previous work experience
Total undergraduate debt*				
Did not borrow	18.8	18.9	9.4	7.0
Borrowed, total	18.7	17.5	9.0	8.7
Less than $1,000	24.5	15.5	4.2	5.9
$1,000–4,999	17.9	19.4	8.7	10.0
$5,000–9,999	17.1	16.7	9.0	7.7
$10,000–19,999	19.8	17.6	9.5	8.9
$20,000 or more	21.5	10.6	10.2	6.9
Baccalaureate degree major				
Professional fields	20.3	17.1	8.6	8.3
Business and management	15.4	17.8	9.7	7.9
Education	24.8	15.0	5.6	6.9
Engineering	22.3	18.6	9.8	8.0
Health professions	23.5	15.8	9.6	9.7
Public affairs/social services	27.0	20.6	8.8	13.6
Arts and sciences	17.6	20.0	10.4	6.9
Biological sciences	21.2	16.4	8.6	5.9
Mathematics and other sciences	20.2	18.6	10.5	7.0
Social science	15.6	20.1	10.8	7.8
History	12.4	25.1	8.1	3.7
Humanities	14.8	19.5	11.5	6.9
Psychology	25.5	24.7	8.7	6.9
Other	15.7	19.0	8.3	7.3
Highest degree attained by 1997				
Bachelor's degree	17.3	18.1	8.9	7.6
Postbaccalaureate certificate	28.3	14.4	7.6	10.9
Master's degree	28.4	21.4	12.1	6.7
First-professional degree	27.2	13.9	3.2	10.9
Doctoral degree	—	—	—	—
Employment status in April 1997				
Full-time	19.0	18.4	9.3	7.8
Part-time	17.0	16.6	6.1	6.7

Table II.5—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated various reasons for taking their current positions that were related to the nature of the work itself, by selected characteristics—Continued

	Related to field of study	Was interesting work	Was intellectual work	Had previous work experience
April 1997 occupation				
Business and management	14.4	18.3	10.3	8.1
Educator	27.3	13.8	7.2	7.7
Engineering	23.7	20.6	9.0	8.4
Health professions	23.2	15.9	8.3	9.4
Other professions	27.2	23.7	10.0	8.0
Computer science, programming	14.0	15.5	15.2	6.7
Noncomputer technician	19.7	22.5	13.8	1.8
Administrative, clerical, support	13.3	20.2	9.4	7.6
Mechanic, operator, laborer	13.7	16.8	6.5	8.5
Sales	11.7	19.1	9.2	5.8
Service	11.9	19.3	3.2	9.7
Military, protective services	22.4	23.1	7.9	3.7
Other, uncodeable	22.5	7.7	9.1	9.5

—Too few cases for a reliable estimate.

*Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table 11.6—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated various financial reasons for taking their current positions, by selected characteristics[1]

	Better advancement opportunity	Good income to start	Good income potential	Good job security
Total	16.1	11.2	10.2	5.4
Gender				
Male	18.4	13.1	12.9	5.9
Female	14.1	9.7	7.9	5.0
Race–ethnicity				
American Indian/Alaskan Native	19.4	11.9	13.5	3.6
Asian/Pacific Islander	21.8	11.0	10.2	6.8
Black, non-Hispanic	12.4	11.0	6.1	4.9
Hispanic	14.0	10.8	7.3	5.3
White, non-Hispanic	16.1	11.3	10.6	5.4
Parents' educational attainment				
Less than high school	10.7	9.0	4.2	6.9
High school or equivalency	16.2	10.6	10.0	5.6
Some postsecondary education	15.0	11.6	10.1	5.3
Bachelor's degree	17.2	11.6	11.0	5.8
Advanced degree	16.0	10.9	10.2	4.2
Marital status in 1997				
Never married	17.9	11.3	12.0	5.8
Married/cohabit as married	14.9	11.2	8.8	4.9
Divorced/separated/widowed	13.2	11.9	8.6	7.5
Number of children in 1997				
No children	16.8	11.4	11.2	5.3
One	14.5	11.2	7.8	5.3
Two or more children	13.9	10.4	6.8	6.1
Age received bachelor's degree				
22 or younger	17.1	11.8	10.2	4.9
23–24	16.4	11.3	11.8	5.8
25–29	16.2	10.1	11.6	6.9
30 or older	12.6	10.0	6.7	5.2
Degree-granting institution (undergraduate)				
Public 4-year				
Nondoctorate-granting	15.6	10.5	10.2	6.1
Doctorate-granting	16.7	11.5	10.2	5.2
Private, not-for-profit 4-year				
Nondoctorate-granting	14.7	10.5	8.5	5.5
Doctorate-granting	16.1	12.5	11.1	4.3
Other	19.8	11.9	15.3	7.2

Table II.6—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated various financial reasons for taking their current positions, by selected characteristics[1] —Continued

	Better advancement opportunity	Good income to start	Good income potential	Good job security
Total undergraduate debt[2]				
Did not borrow	16.8	10.7	10.7	5.7
Borrowed, total	14.8	12.0	9.6	5.1
Less than $1,000	15.3	8.2	10.2	8.2
$1,000–4,999	15.8	11.2	11.8	4.5
$5,000–9,999	14.3	11.6	10.7	5.3
$10,000–19,999	14.6	12.3	6.8	5.2
$20,000 or more	13.3	20.2	8.4	4.1
Baccalaureate degree major				
Professional fields	16.5	12.0	11.0	5.5
Business and management	23.6	12.8	15.0	5.5
Education	5.2	7.3	5.4	3.5
Engineering	17.0	15.9	12.7	6.1
Health professions	14.9	12.7	7.5	6.2
Public affairs/social services	12.8	15.1	7.5	10.0
Arts and sciences	15.1	10.8	9.2	5.4
Biological sciences	9.1	7.3	6.5	8.2
Mathematics and other sciences	18.1	9.6	9.5	4.8
Social science	17.3	12.1	10.8	5.3
History	9.3	9.0	3.9	2.1
Humanities	13.1	12.4	9.2	5.2
Psychology	17.4	9.4	9.7	6.8
Other	16.7	9.2	9.2	5.2
Highest degree attained by 1997				
Bachelor's degree	16.8	11.3	10.7	5.4
Postbaccalaureate certificate	12.5	9.3	6.2	6.1
Master's degree	11.6	11.2	7.2	5.3
First-professional degree	8.8	12.2	6.7	7.7
Doctoral degree	—	—	—	—
Employment status in April 1997				
Full-time	16.8	11.6	10.8	5.7
Part-time	7.3	6.1	2.4	1.7

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Table 11.6—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated various financial reasons for taking their current positions, by selected characteristics[1] —Continued

	Better advancement opportunity	Good income to start	Good income potential	Good job security
April 1997 occupation				
Business and management	24.9	12.7	13.7	5.7
Educator	5.0	5.9	2.6	3.3
Engineering	19.9	15.6	15.6	5.2
Health professions	14.2	13.4	8.0	5.5
Other professions	14.0	13.3	8.2	5.8
Computer science, programming	19.4	11.8	13.5	4.4
Noncomputer technician	4.3	16.8	6.6	0
Administrative, clerical, support	15.8	10.2	9.4	6.8
Mechanic, operator, laborer	14.1	9.0	9.5	4.8
Sales	24.8	14.8	20.0	4.9
Service	8.5	7.0	8.4	4.7
Military, protective services	7.4	10.4	7.3	15.7
Other, uncodeable	13.4	10.8	6.5	4.9

—Too few cases for a reliable estimate.

[1]Respondents were asked a series of questions about specific reasons why they selected their current jobs. These answers were the most common reasons relating to finances that were mentioned by respondents.

[2]Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Table II.7—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated that they had found their jobs through various information channels, by selected characteristics[1]

	Found job through referrals	Found job through want ad	Found job through employment agency
Total	34.8	22.0	8.0
Gender			
Male	36.1	21.0	9.3
Female	33.6	22.8	7.0
Race–ethnicity			
American Indian/Alaskan Native	40.4	7.3	10.1
Asian/Pacific Islander	26.8	23.4	10.5
Black, non-Hispanic	31.0	21.8	7.6
Hispanic	33.4	19.6	7.6
White, non-Hispanic	35.5	22.2	8.0
Parents' educational attainment			
Less than high school	29.2	23.1	8.9
High school or equivalency	33.2	23.5	7.4
Some postsecondary education	35.8	23.5	8.0
Bachelor's degree	34.2	20.9	9.6
Advanced degree	38.4	19.4	7.5
Marital status in 1997			
Never married	35.7	22.5	9.1
Married/cohabit as married	34.3	21.3	7.2
Divorced/separated/widowed	31.6	24.4	7.6
Number of children in 1997			
No children	34.4	22.4	8.6
One	39.6	20.8	7.1
Two or more children	31.6	21.1	5.9
Age received bachelor's degree			
22 or younger	34.8	22.3	8.4
23–24	37.5	22.1	7.3
25–29	35.1	20.2	9.2
30 or older	30.5	22.4	7.5
Degree-granting institution (undergraduate)			
Public 4-year			
Nondoctorate-granting	35.6	23.9	7.0
Doctorate-granting	33.8	21.1	8.1
Private, not-for-profit 4-year			
Nondoctorate-granting	34.1	23.3	8.3
Doctorate-granting	38.2	18.3	9.8
Other	31.0	26.0	6.2

Table II.7—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated that they had found their jobs through various information channels, by selected characteristics[1] —Continued

	Found job through referrals	Found job through want ad	Found job through employment agency
Total undergraduate debt[2]			
Did not borrow	35.7	21.4	7.8
Borrowed, total	33.4	23.1	8.3
Less than $1,000	26.6	32.4	11.8
$1,000–4,999	31.9	22.4	8.9
$5,000–9,999	35.4	22.9	8.0
$10,000–19,999	33.3	23.5	8.3
$20,000 or more	36.2	18.5	3.4
Baccalaureate degree major			
Professional fields	34.0	20.6	7.9
Business and management	37.9	22.3	10.4
Education	32.2	17.7	4.6
Engineering	29.5	22.7	9.2
Health professions	27.6	19.1	6.9
Public affairs/social services	37.5	20.4	3.7
Arts and sciences	34.9	24.4	7.9
Biological sciences	33.7	24.8	8.4
Mathematics and other sciences	32.7	19.7	10.2
Social science	34.8	26.2	7.7
History	41.8	29.6	7.1
Humanities	36.1	23.4	7.1
Psychology	33.6	27.0	6.0
Other	37.3	22.3	8.8
Highest degree attained by 1997			
Bachelor's degree	34.9	22.5	8.2
Postbaccalaureate certificate	28.9	18.1	10.5
Master's degree	35.2	20.6	6.0
First-professional degree	32.6	6.8	5.7
Doctoral degree	—	—	—
Employment status in April 1997			
Full-time	34.5	22.2	8.2
Part-time	38.3	19.6	5.2

Table II.7—Percentage of 1992–93 bachelor's degree recipients employed in April 1997 who indicated that they had found their jobs through various information channels, by selected characteristics[1] —Continued

	Found job through referrals	Found job through want ad	Found job through employment agency
April 1997 occupation			
Business and management	36.6	21.7	11.2
Educator	30.9	16.7	3.6
Engineering	29.7	21.2	8.6
Health professions	31.0	21.0	5.8
Other professions	31.6	22.3	7.1
Computer science, programming	33.4	23.1	13.3
Noncomputer technician	33.7	19.0	11.5
Administrative, clerical, support	37.8	28.1	8.2
Mechanic, operator, laborer	42.2	26.5	4.8
Sales	40.3	21.9	12.5
Service	45.5	19.2	5.1
Military, protective services	26.2	20.5	6.2
Other, uncodeable	23.4	29.8	3.6

—Too few cases for a reliable estimate.

[1]Respondents were asked a series of questions about specific ways they found their current jobs. These answers were the most common reasons that were mentioned by respondents.

[2]Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Appendix A—Glossary

This glossary describes the variables used in this report. The variables were taken directly from the B&B:97 Data Analysis System (DAS), an NCES software application that generates tables from the B&B:97 data. A description of the DAS software can be found in appendix B. The labels are in bold capital letters and correspond to the names of the variables in the DAS.

The glossary index is organized into eight sections: Student Characteristics; Post-Baccalaureate Application Characteristics; Postbaccalaureate Enrollment as of 1997; Employment Status as of April 1997; General Characteristics of April 1997 Job; Satisfaction with Various Employment Characteristics at April 1997 Job; Reasons For Taking April 1997 Job; and How Respondents Found April 1997 Jobs. In the index below, the variables in each section are listed in the order they appear in the compendium tables; the glossary is in alphabetical order by variable name (displayed in the right-hand column).

GLOSSARY INDEX

STUDENT CHARACTERISTICS

Age received bachelor's degree B2AGATBA
Baccalaureate degree major B2BAMAJR
Race–ethnicity B2ETHNIC
Highest degree earned after bachelor's degree B2HDGPRG
Marital status April 1997 ..... B2MAR497
Number of children B2NDEP
Employment/enrollment status April 1994 ..... B2NM9404
Gender B2RSEX
Panel weight for NPSAS and B&B ..... BNBPANEL
Total undergraduate debt ..... BORFEDR
Parents' educational attainment ..... PAREDUC
Degree-granting institution for bachelor's degree ..... SECTOR_B

POST-BACCALAUREATE APPLICATION CHARACTERISTICS

Number of acceptances to graduate or professional school B2GRACCT
Whether the respondent ever applied to graduate or professional school B2GRAPP
Quartile rank on composite score of all three general exam subtests B2GRESUM
Graduate or professional exams taken B2GREXMS
Normalized undergraduate GPA on a 4.0 scale ..... NORMGPA

POST-BACCALAUREATE ENROLLMENT AS OF 1997

Highest level of education ever expected to complete 1993 ..... ANYHILVL
Aid package received for graduate study B2AIDGR
Attainment and enrollment B2ATTENR
Status of graduate coursework B2CURCRS
Respondent enrolled at time of B&B:97 interview B2CURENR
Status of graduate exams B2CUREXM
Status of graduate thesis B2CURTHS
Enrollment status April 1997 ..... B2EN9704
Number of months between receipt of bachelor's degree and graduate school enrollment B2GRDENR
Carnegie classification for highest post-baccalaureate enrollment B2HENCC
Major field of highest post-baccalaureate degree enrollment B2HENMAJ
Highest degree program enrolled in after earning a bachelor's degree B2HENPRG
Highest degree expected in 1997 ..... B2HIEXP
Degree program for most recent post-baccalaureate enrollment B2RCNPRG
Weekly attendance, most recent post-baccalaureate enrollment B2RCNTIM
Highest level of education ever expected to complete 1994 ..... HIGHDEG

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Annual salary at April 1997 job B2APRSAL
Employment status April 1997 ..... B2EM9704
Number of jobs held since bachelor's B2JOBN1
Employment/enrollment status April 1997 ..... B2NM9704
Longest period of continuous unemployment since earning bachelor's degree B2UNEMOS
Total number of months unemployed since earning bachelor's degree B2UNEMPD
Number of unemployment spells B2UNEMSP

GENERAL CHARACTERISTICS OF APRIL 1997 JOB

Average number of hours worked per week at job B2AJBHRS
Health insurance at job B2AJBN01
Retirement benefits at job B2AJBN02
Paid vacation at job B2AJBN03
Paid sick leave at job B2AJBN04
Degree of career potential at job B2AJBPOT
Part-time status and preference for full-time work at April 1997 or most recent job B2AJFTPT
Job involved skills from other job B2AJPREV
Relationship between job and field of study B2AJRELT

SATISFACTION WITH VARIOUS EMPLOYMENT CHARACTERISTICS AT APRIL 1997 JOB

Satisfaction with pay B2AJST01
Satisfaction with fringe benefits B2AJST02
Satisfaction with job challenge B2AJST03
Satisfaction with working conditions B2AJST04
Satisfaction with promotion opportunity B2AJST05
Satisfaction with job security B2AJST06
Satisfaction with supervisor B2AJST07
Satisfaction with co-workers B2AJST08
Satisfaction with educational benefits B2AJST09

REASONS FOR TAKING APRIL 1997 JOB

Took job because had previous work experience B2AJRE03
Took job because it was related to field of study B2AJRE04
Took job because it offered good income to start B2AJRE05
Took job because it offered good income potential B2AJRE06
Took job because it offered good job security B2AJRE07
Took job because it offered better advancement opportunity B2AJRE08
Took job because it was interesting work B2AJRE10
Took job because it was intellectual work B2AJRE11

HOW RESPONDENTS FOUND APRIL 1997 JOBS

Found job through referrals B2AJFN01
Found job through want ad B2AJFN03
Found job through employment agency B2AJFN06

Highest level of education ever expected to complete 1993 **ANYHILVL**

Indicates highest level of education respondent expected to complete when asked in 1993. Degrees expected were classified as follows:

Bachelor's degree or less
Master's
First-professional
Doctoral
All others

Age received bachelor's degree **B2AGATBA**

Indicates the respondent's age when he or she received a bachelor's degree. Age was defined in the following categories:

22 or younger
23–24
25–29
30 or older

Aid package received for graduate study **B2AIDGR**

Identifies the type(s) of aid (if any) a respondent received for graduate or professional study in the most recent academic year enrolled (July through June). Grants include fellowships and tuition remission. Campus jobs include assistantships. Aid package was defined in the following categories:

Package included loan, no grant (may have included other sources of aid)
Package included grant, no loan (may have included other sources of aid)
Package included grant and loan (may have included other sources of aid)
Campus job only
Employee benefits only
Other aid package
Did not receive aid

Average number of hours worked per week at job **B2AJBHRS**

Indicates self-reported number of hours worked per week at April 1997 job.

Health insurance at job **B2AJBN01**

Indicates whether respondent received health insurance at April 1997 job.

Retirement benefits at job **B2AJBN02**

Indicates whether respondent received retirement benefits at April 1997 job.

Paid vacation at job **B2AJBN03**

Indicates whether respondent received paid vacation at April 1997 job.

Paid sick leave at job **B2AJBN04**

Indicates whether respondent received paid sick leave at April 1997 job.

Degree of career potential at job **B2AJBPOT**

Indicates the degree of career potential respondents reported for their April 1997 job.

Does not have much career potential
Has definite career potential

Found job through referrals **B2AJFN01**

Respondent response to question: "How did you find out about this April 1997 job?"

Respondent answers include the following categories:

Referred by family, friends, professors
Started own business or brought into family business
Want ad
Campus job placement office
Explored possible job opportunities through interview
Was recruited by headhunter/employment agency/recruiter
Advancement in organization/employer where previously employed
Volunteer/internship work in field
Contacted in response to blind resume
Recruiting fair
Professional or trade journal
Job announcement in unemployment office
Professional meeting
Other

Respondents who owned or co-owned a business were skipped out of this question, as were respondents who had no jobs.

Found job through want ad **B2AJFN03**

Indicates respondent's self-reported answer for finding April 1997 job. See B2AJFN01 for more information.

Found job through employment agency **B2AJFN06**

Indicates respondent's self-reported answer for finding April 1997 job. See B2AJFN01 for more information.

Part-time status and preference for full-time work at April 1997 or most recent job **B2AJFTPT**

For those employed part time at April 1997 job, indicates whether or not they would prefer to work full time. Variable also includes categories for respondents who work full time or who work part time, but whose preference for full-time work is unknown. Categories are as follows:

Part-time, full-time preferred
Part-time, full-time not preferred
Part-time, preference unknown
Full-time

April 1997 occupation type **B2AJOBOC**

Indicates respondent's occupation type in April 1997 job. Responses were coded as follows:

Business and management	Managers - Executive (36); Managers - Mid-level (37); Managers - Supervisory, Office, other (38); Financial Services Professionals (16)
Educator	Educators - K–12 Teachers (24); Educators - Instructors other than K–12 (25)
Engineering	Engineers, Architects, Software Engineers (27)
Health professions	Medical Practice Professionals (21); Medical Licensed Professionals (22); Medical Services (23)
Other professions	Skilled Operative (11); Legal Professionals (19); Human Services Professionals (26); Scientists, Statistician Professionals (28); Technical/Professional Workers, other (30); Editors, Writers, Reporters, Public Relations (34); Performers/Artists (35)
Computer science, programming	Computer Systems/Related Professional/Technical Workers (31); Computer Programmers (32); Computer and Computer Equipment Operators (33)
Noncomputer technician	Research Assistant/Lab Technicians (29)
Administrative, clerical, support	Secretaries, Specialized Secretary, Receptionist (1); Cashiers, Tellers, Sales Clerks (2); Clerks - Data Entry (3); Clerical, other (4); Business/Financial Support Services (15); Legal Support (20)
Mechanic, operator, laborer	Farmers, Foresters, Farm/Forest Laborers (5); Cooks, Chefs, Bakers, Cake Decorators (7); Laborer (other than Farm) (8); Mechanics, Repairers, Service Technicians (9); Craftsmen (10); Transport Operatives (other than pilots) (12)
Sales	Sales/Purchasing (17)
Service	Personal Services (6); Customer Service (18); Health/Recreation Services (39)

Military, protective services	Protective Services, Criminal Justice Administration (13); Military (14)
Other, uncodeable	Uncodeable (0); Uncodeable, other employed (40)

Job involved skills from other job **B2AJPREV**

Indicates whether or not respondent felt that April 1997 job built on specific skills or knowledge acquired in previous jobs.

Took job because had previous work experience **B2AJRE03**

Indicates respondent's self–reported reasons for accepting April 1997 job. Responses were coded as follows:

Only job I could find
Needed a job/money
Previous work experience in the area
Related to field of study
Good income to start
Good income potential over career
Job security
Better opportunity for advancement
Prestige and status
Interesting work
Intellectually challenging work
Freedom to make own decisions at work
Interaction with people
Opportunity to help people/be useful to society
Convenience
Able to work independently of others
Allows for a great deal of travel
Allows for roots to be established/don't have to move around
Allows time for non-work-related activities
Other

Took job because it was related to field of study **B2AJRE04**

Indicates respondent's self–reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Took job because it offered good income to start **B2AJRE05**

Indicates respondent's self–reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Took job because it offered good income potential **B2AJRE06**

Indicates respondent's self–reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Took job because it offered good job security **B2AJRE07**

Indicates respondent's self-reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Took job because it offered better advancement opportunity **B2AJRE08**

Indicates respondent's self-reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Took job because it was interesting work **B2AJRE10**

Indicates respondent's self-reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Took job because it was intellectual work **B2AJRE11**

Indicates respondent's self-reported reasons for accepting April 1997 job. See B2AJRE03 for more information.

Relationship between job and field of study **B2AJRELT**

Indicates respondent's answer to question about how closely April 1997 job was related to his or her undergraduate or graduate field of study. Responses were coded as follows:

Closely related to degree
Somewhat related to degree
Not at all related to degree

Satisfaction with pay **B2AJST01**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job.

(Are/were) you very satisfied, somewhat satisfied, or dissatisfied
with the following aspects of your employment at (April 1997 job)?
the pay
the fringe benefits
the importance and challenge of your job
the working conditions
your opportunity for promotion
your job security
your supervisor
your relationship with co-workers
your opportunity for further education

Satisfaction with fringe benefits **B2AJST02**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with job challenge **B2AJST03**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with working conditions **B2AJST04**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with promotion opportunity **B2AJST05**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with job security **B2AJST06**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with supervisor **B2AJST07**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with co–workers **B2AJST08**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Satisfaction with educational benefits **B2AJST09**

Indicates respondent's answer to question about satisfaction with various aspects of April 1997 job. See B2AJST01 for more information.

Annual salary at April 1997 job **B2APRSAL**

Total annual salary of April 1997 job was calculated using items on pay rate and salary. A few cases that had a total salary of greater than $500,000 were set to 500,000.

Note: although the source salary variables were collected for the job held in April 1997 or current/most recent job, B2APRSAL was created only for those respondents who held a job during April 1997.

Less than $10,000
$10,000–14,999
$15,000–19,999
$20,000–24,999
$25,000–34,999
$35,000–49,999
$50,000–74,999
$75,000 or more

Attainment and enrollment **B2ATTENR**

Indicates respondent's degree enrollment and attainment status when interviewed in 1997. Categories are as follows:

No graduate/first-professional degree, not enrolled
Attained graduate/first-professional degree or currently enrolled
- No graduate/first-professional degree, enrolled
- Attained, not enrolled
- Attained and enrolled

Baccalaureate degree major **B2BAMAJR**

B2BAMAJR identifies a respondent's undergraduate major field of study. Responses were classified as follows:

Professional fields
- Business and management
- Education
- Engineering
- Health professions
- Public affairs/social services

Arts and sciences
- Biological sciences
- Mathematics and other sciences
- Social science
- History
- Humanities
- Psychology

Other

Status of graduate coursework **B2CURCRS**

Indicates respondent's graduate program status concerning courses for each graduate program (master's, first-professional, or doctoral) in which respondent was enrolled at the time of the interview. The interviews took place between April and December 1997. Responses were defined in the following categories:

Haven't started
Working on
Completed
Not completed
Not required

Respondent enrolled at time of B&B:97 interview **B2CURENR**

Indicates respondents who were enrolled in school at the time of the B&B:93/97 interview.

Status of graduate exams **B2CUREXM**

Indicates respondent's graduate program status concerning exams for each graduate program (master's, first-professional, or doctoral) in which respondent was enrolled in the time of the interview. The interviews took place between April and December 1997. Responses were defined in the following categories:

Haven't started
Working on
Completed
Not completed
Not required

Status of graduate thesis **B2CURTHS**

Indicates respondent's graduate program status concerning thesis for each graduate program (master's, first-professional, or doctoral) in which respondent was enrolled at the time of the interview. The interviews took place between April and December 1997. Responses were defined in the following categories:

Haven't started
Working on
Completed
Not completed
Not required

Employment status April 1997 **B2EM9704**

Respondents were asked to provide information for all their jobs since graduating from college, including the beginning and ending dates. Based on these dates, monthly indicators were constructed characterizing the employment status of each respondent. Respondents were asked to provide additional information for their April job. A job was considered full time if the respondent reported working 35 or more hours. For respondents with more than one job, the status variable characterizes the job they reported as their primary employment—i.e., the job in which they worked the most hours. Thus, if they were employed in a full-time job and a part-time job, they were coded as full time. If they worked in two or more part-time jobs, they were coded as part time even if their hours totaled 35 or more per week.

Full-time
Part-time
Unemployed
Out of the labor force

Note: Unemployment implies that the respondent reported looking for work. This differs from being out of the labor force, which implies that the respondent was not available for work and not looking for work. Most respondents who were out of the labor force were enrolled in further schooling.

Enrollment status April 1997 **B2EN9704**

Indicates respondent's enrollment status in April 1997. Categories are defined as follows:

Enrolled full time
Enrolled part time

Race–ethnicity **B2ETHNIC**

Indicates the race and ethnicity of the respondent. Created by combining two items respondents reported, their race (American Indian/Alaskan Native, Asian/Pacific Islander, black, white, other) and whether or not they were of Hispanic origin.

American Indian/Alaskan Native
Asian/Pacific Islander
Black, non–Hispanic
Hispanic
White, non–Hispanic

Number of acceptances to graduate or professional school **B2GRACCT**

Combines data from the First and Second Follow–up surveys on the number of acceptances to graduate or professional school since earning the bachelor's degree.

Whether the respondent ever applied to graduate or professional school **B2GRAPP**

Combines data from the First and Second Follow–up surveys on applications for admission to graduate or professional school since the B&B student earned the bachelor's degree.

Number of months between receipt of bachelor's degree and graduate school enrollment **B2GRDENR**

Gives the total number of months between the date the respondent received the bachelor's degree and the date she or he first enrolled in a graduate program after receiving the bachelor's degree. Responses were classified as follows:

12 months or fewer
13–24 months
25–36 months
More than 36 months

Quartile rank on composite score of all three GRE general exam subtests **B2GRESUM**

Summarizes student's quartile rank on composite score of all three GRE general exam subtest scores (verbal, quantitative, and analytic). Quartiles were labeled as follows:

Top 25 percent on all three
Top 25 percent on two of three
Top 25 percent on one of three
Middle 50 percent on all three
All others

Graduate or professional exams taken **B2GREXMS**

Combines data from the First and Second Follow–up surveys on which exams the respondent took for admission to graduate/professional school since receiving the bachelor's degree. Categories are as follows:

Total (took any test)
GRE
GMAT
LSAT
MCAT
All others

Highest degree earned after bachelor's degree **B2HDGPRG**

Identifies degree type for the highest degree a student earned after completing the bachelor's degree. If a respondent held only one post–baccalaureate degree, B2HDGPRG is set to that degree. If a respondent was in a dual degree program, B2HDGPRG was set to the highest degree. Degree types were classified as follows:

Bachelor's degree	No post–baccalaureate degree/enrollment; bachelor's degree only
Postbaccalaureate certificate	Post–baccalaureate certificate; certificate or license; non–degree program
Master's degree	Master's degree; MBA; post–master's certificate
First-professional degree	Medicine, law, theology, or other health science degree
Doctoral degree	Doctor of Philosophy, Doctor of Education, or other doctoral degree

Carnegie classification for highest post–baccalaureate enrollment **B2HENCC**

Carnegie classification for the institution in which respondent enrolled for highest level of post-baccalaureate studies. Institutions were categorized as follows:

Research university	Includes Research Universities I and II. These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research. They award 50 or more doctoral degrees[24] each year. Research Universities I receive between $15.5 million and $40 million in annual federal support, while Research Universities II receive $40 million or more.[25]
Doctoral university	Includes Doctoral Universities I and II. These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. Doctoral Universities I award at least 40 doctoral degrees annually in five or

[24] Doctoral degrees include Doctor of Education, Doctor of Juridical Science, Doctor of Public Health, and the Ph.D in any field.

[25] Total federal obligation figures are available from the National Science Foundation's annual report called *Federal Support to Universities, Colleges, and Nonprofit Institutions*. The years used in averaging total federal obligations are 1989, 1990, and 1991.

	more disciplines. Doctoral Universities II award at least ten doctoral degrees in three or more disciplines, or 20 or more doctoral degrees in one or more disciplines.[26]
Master's college or university	Includes Master's (Comprehensive) Colleges and Universities I and Master's (Comprehensive) Colleges and Universities II. These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. Master's (Comprehensive) Colleges and Universities I award 40 or more master's degrees annually in three or more disciplines. Master's (Comprehensive) Colleges and Universities II award 20 or more master's degrees annually in one or more disciplines.
All others	Includes Baccalaureate (Liberal Arts) Colleges I; Baccalaureate Colleges II; Associate of Arts Colleges; professional and specialized institutions; theological seminaries, Bible colleges, and others; medical schools and medical centers; other separate health profession schools; schools of engineering and technology; schools of business and management; schools of art, music, and design; schools of law, teachers colleges; other specialized institutions; and tribal colleges and universities.

Major field of highest post–baccalaureate degree enrollment **B2HENMAJ**

Identifies the field of study for the highest program in which respondent enrolled after receiving a bachelor's degree. Programs were classified as follows:

Business and management
Education
Medicine/dentistry
Other health services
Law
Engineering/mathematics/computer science
Life and physical sciences
Social and behavioral sciences
Arts and humanities
All other

Highest degree program enrolled in after earning a bachelor's degree **B2HENPRG**

Identifies degree type for the highest degree program in which respondent enrolled after earning a bachelor's degree. Degrees are defined as follows:

Master's other than MBA
MBA
First-professional
Doctorate
Other (includes nondegree programs)

[26] Distinct disciplines are determined by the U.S. Department of Education's Classification of Instructional Programs 4-digit series.

Highest degree expected in 1997 **B2HIEXP**

Indicates highest level of education respondent expects to complete when asked in 1997. Degrees were classified as follows:

Master's
First-professional
Doctoral
All others

Number of jobs held since bachelor's **B2JOBN1**

Indicates number of jobs respondent has held since earning the bachelor's degree. Combines data from First and Second Follow–up surveys. Includes jobs begun before the degree if respondent continued in that job after the respondent received a bachelor's degree. Categories are as follows:

0 jobs
One job
Two jobs
Three jobs
Four jobs or more

Marital status April 1997 **B2MAR497**

Indicates respondent's marital status as of April 1997. Categories are defined as follows:

Never married	Single, never been married
Married/cohabit as married	Married; living in a marriage–like relationship
Divorced/separated/widowed	Divorced; separated; widowed

Number of children **B2NDEP**

The number of children for whom respondent was financially responsible (provided at least half the children's support) at the time of their interview.

Note: only respondents who indicated that they had children were asked this question; all others were considered a legitimate skip. In the tables, the legitimate skip codes were combined with the zero codes (i.e., had children but were not financially responsible for at least half their support) to form the "no children" category.

No children
One
Two or more

Employment/enrollment status April 1994 **B2NM9404**

Indicates respondent's employment and/or enrollment status as of April 1994. Categories are defined as follows:

Full-time enrolled, employed
Full-time enrolled, not employed

Part-time enrolled

Not enrolled, employed
Not enrolled, not employed

Employment/enrollment status April 1997 **B2NM9704**

Indicates respondent's employment and/or enrollment status as of April 1997. For all respondents, these characteristics are grouped as follows:

Employed
Enrolled

In part of the analysis, they are also grouped according to more specific enrollment and employment characteristics that take part-time/full-time status into account.

Not enrolled, employed
Not enrolled, not employed

Part-time enrolled, employed
Part-time enrolled, not employed

Full-time enrolled, employed
Full-time enrolled, not employed

Degree program for most recent post–baccalaureate enrollment **B2RCNPRG**

Identifies degree type for the current or most recent degree for which the respondent enrolled (after earning bachelor's degree). Degrees are defined as follows:

Master's other than MBA
MBA
First-professional
Doctoral
Other (includes nondegree programs)

Weekly attendance, most recent post–baccalaureate enrollment **B2RCNTIM**

Indicates time of the week when respondents attended post–baccalaureate program. Time of week was defined as follows:

Weekdays
Weeknights
Weekends

Gender **B2RSEX**

Respondent's gender.

Male
Female

Longest period of continuous unemployment since earning bachelor's degree **B2UNEMOS**

The longest period of continuous unemployment (in months) since graduation.

Total number of months unemployed since earning bachelor's degree **B2UNEMPD**

Total number of months unemployed since receiving baccalaureate degree.

Number of unemployment spells **B2UNEMSP**

The total number of spells (continuous month[s]) of unemployment since graduation.

Panel weight for NPSAS and B&B **BNBPANEL**

Panel weight for NPSAS, B&B:93/94, and B&B:93/97 response. This is the panel weight for B&B:93/97, which is adjusted for nonresponse (nonrespondents have PANEL2=0). Panel respondents are those who responded to all three surveys: NPSAS:93, B&B:93/94, and B&B:93/97. Therefore, the panel category is greater than 0 for only those persons who responded to all three surveys.

Total undergraduate debt **BORFEDR**

Cumulative amount of federal student loans borrowed through 1992–93, revised after a record match of NPSAS:93 students with the National Student Loan Data System (NSLDS) in 1997. Comparable to BORFED in NPSAS:96. The original variable BORFED was based on responses in the student interview, the institutional record of loans in 1992–93, and a match with the federal student loan tape dump (the precursor to NSLDS) for loans in 1992–93. BORFEDR assumes that students without an interview and with no NSLDS record did not borrow, although this is not necessarily the case.

Highest level of education ever expected to complete 1994 **HIGHDEG**

Indicates highest level of education respondent expected to complete when asked in 1994. Degrees expected were classified as follows:

Master's
First-professional
Doctoral
All others

Normalized undergraduate GPA on a 4.0 scale **NORMGPA**

Respondent's normalized calculated undergraduate GPA, based on recorded grades at sample school (4.0 scale). GPA was categorized as follows:

Under 2.5
2.5 to 2.99
3.0 to 3.49
3.5 or above

Parents' educational attainment **PAREDUC**

The highest level of education completed by either parent.

Less than high school
High school or equivalency
Some postsecondary education (including associate's degree)
Bachelor's degree
Advanced degree

Degree–granting institution for bachelor's degree **SECTOR_B**

Identifies the type of institution that awarded the bachelor's degree.

Public institution	4-year nondoctorate-granting (institution that grants up to master's degrees)
	4-year doctorate-granting
Private, not-for-profit (independent) institution	4-year nondoctorate-granting (institution that grants up to master's degrees)
	4-year doctorate-granting
Other	Private, for-profit institutions and institutions whose type could not be determined (a small number of 1992–93 bachelor's degree recipients were sampled at an institution other than the one where they received the degree).

Appendix B—Technical Notes and Methodology

The Baccalaureate and Beyond Longitudinal Study[27]

The Baccalaureate and Beyond Longitudinal Study (B&B:93) tracks the experiences of a cohort of college graduates who received their baccalaureate degree during the 1992–93 academic year and were first interviewed as part of the National Postsecondary Student Aid Study (NPSAS:93). The survey collects information about this group in terms of their demographic background characteristics, academic enrollments, degree completions, employment, and public service activities. The data derived from this survey permit a variety of analyses concerning the outcomes of postsecondary education, graduate and professional program access, and rates of return on investment in education.

The B&B:93/97 survey is the Second Follow-up interview of persons who received a bachelor's degree in the 1992–93 academic year. Baseline data for the B&B cohort were collected as part of NPSAS:93. The First Follow-up interview (B&B:93/94) collected information from respondents 1 year after they received their bachelor's degree; the Second Follow-up (B&B:93/97) collected data 4 years after they received their bachelor's degree.

Data collection for the Second Follow-up of Baccalaureate and Beyond took place from April through December of 1997. The B&B cohort was made up of 11,192 individuals who were determined eligible for follow-up in 1997. For the Second Follow-up, the number of interviews completed was 10,093. Eighty-three percent of the sample responded to all three rounds; these 9,274 respondents are classified as the B&B panel.

The NPSAS:93 sample, while representative and statistically accurate, was not a simple random sample. Instead, the survey sample was selected using a more complex three-step procedure with stratified samples and differential probabilities of selection at each level. First, postsecondary institutions were initially selected within geographic strata. Once institutions were organized by zip code and state, they were further stratified by control (i.e., public; private, not-for-profit; or private, for-profit) and degree offering (less-than-2-year, 2- to 3-year, 4-year non-

[27]The text in this section is based on excerpts from the *Baccalaureate and Beyond Longitudinal Study: 1993/97 Methodology Report* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, forthcoming).

doctorate-granting, and 4-year doctorate-granting).[28] For more detailed information about the NPSAS:93 survey, refer to the *Methodology Report for the National Postsecondary Student Aid Study, 1992–93* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1995). For more information on procedures for the Baccalaureate and Beyond First Follow-up Study (B&B:93/94), consult the *Baccalaureate and Beyond Longitudinal Study: 1993/94 Methodology Report* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1996). For more information on procedures for the Baccalaureate and Beyond Second Follow-up Study (B&B:93/97), consult the *Baccalaureate and Beyond Longitudinal Study: 1993/97 Methodology Report* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, forthcoming).

Sample weights. B&B:93/97 final weights were calculated by making a nonresponse adjustment to the baseline B&B weight calculated for B&B:93/94. This baseline B&B weight is an adjustment of the baseline NPSAS:93 weight. All analyses in this report are weighted to compensate for unequal probability of selection into the B&B sample and to adjust for nonresponse. The B&B panel weight, based on respondents who participated in all three surveys, is used in both the report and compendium analyses.

Accuracy of Estimates

The statistics in this report are estimates derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors occur because observations are made only on samples of students, not on entire populations. Nonsampling errors occur not only in sample surveys but also in complete censuses of entire populations. Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all students in all institutions in the sample (some students or institutions refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, sampling, and imputing missing data.

Data Analysis System

The estimates presented in this report were produced using the B&B:93/97 Data Analysis System (DAS). The DAS software makes it possible for users to specify and generate their own

[28]The NPSAS universe excludes institutions offering only correspondence courses, institutions enrolling only their own employees, and U.S. service academies.

tables from the B&B:93/97 data. With the DAS, users can replicate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates proper standard errors[29] and weighted sample sizes for these estimates. For example, table B1 contains standard errors that correspond to table I.1 in the compendium of this report, and was generated by the B&B:93/97 DAS. If the number of valid cases is too small to produce a reliable estimate (fewer than 30 cases), the DAS prints the message "low N" instead of the estimate.

All variables in the DAS are integers. To preserve decimal precision for certain variables, values in the DAS have been multiplied by a factor of 10. For example, grade point averages were multiplied by 100, and therefore range from 0–400 in the DAS. When averages for such variables appear in this report, estimates and standard errors were divided by the appropriate factor of 10 to restore the original scale.

In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. Included in the output with the correlation matrix are the design effects (DEFTs) for each variable in the matrix. Since statistical procedures generally compute standard errors based on an assumption of simple random sampling, the standard errors must be adjusted with the design effects to take into account B&B's complex sample design. (See discussion under "Statistical Procedures" below for the adjustment procedure.)

For more information about the B&B:93/97 and other Data Analysis Systems, consult the NCES DAS website (www.nces.ed.gov/das) or its West Coast mirror site (www.pedar-das.org), or contact:

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[29]The B&B sample is not a simple random sample, and therefore simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by the linear terms of a Taylor series expansion. The procedure is typically referred to as the Taylor series method.

Table B1—Standard errors for compendium table I.1: Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in April 1997, and percentages employed and enrolled, by selected student characteristics

	Not enrolled		Part-time enrolled		Full-time enrolled		Total	
	Employed	Not employed	Employed	Not employed	Employed	Not employed	Employed[1]	Enrolled[2]
Total	0.61	0.32	0.37	0.08	0.28	0.31	0.45	0.54
Gender								
Male	0.86	0.39	0.50	0.14	0.41	0.47	0.64	0.76
Female	0.79	0.50	0.50	0.11	0.35	0.35	0.58	0.69
Race–ethnicity								
American Indian/Alaskan Native	6.40	4.81	3.18	2.42	0.00	2.47	5.78	4.56
Asian/Pacific Islander	2.81	2.00	1.66	0.59	0.67	1.50	2.35	2.38
Black, non-Hispanic	2.26	0.90	1.49	0.41	1.20	0.93	1.33	2.07
Hispanic	2.62	1.52	2.01	0.46	1.38	1.28	1.91	2.57
White, non-Hispanic	0.64	0.35	0.40	0.09	0.30	0.31	0.47	0.56
Parents' educational attainment								
Less than high school	2.64	1.42	1.88	0.61	0.75	1.04	1.97	2.25
High school or equivalency	1.03	0.65	0.64	0.12	0.45	0.35	0.74	0.83
Some postsecondary education	1.33	0.74	0.80	0.15	0.69	0.52	0.91	1.13
Bachelor's degree	1.12	0.60	0.78	0.11	0.53	0.51	0.76	1.03
Advanced degree	1.22	0.75	0.72	0.25	0.59	0.72	1.00	1.12
Marital status in 1997								
Never married	0.92	0.43	0.50	0.13	0.46	0.50	0.67	0.82
Married/cohabit as married	0.76	0.51	0.52	0.10	0.31	0.29	0.59	0.64
Divorced/separated/widowed	2.49	1.13	1.83	0.81	1.22	1.24	1.80	2.36
Number of children in 1997								
No children	0.70	0.31	0.42	0.09	0.34	0.40	0.50	0.64
One	1.37	0.97	0.89	0.35	0.51	0.50	1.12	1.13
Two or more children	1.80	1.45	1.27	0.20	0.48	0.19	1.48	1.35
Age received bachelor's degree								
22 or younger	0.86	0.39	0.51	0.07	0.44	0.56	0.66	0.81
23–24	1.12	0.71	0.73	0.21	0.34	0.45	0.85	0.92
25–29	1.63	1.11	0.94	0.17	0.96	0.30	1.16	1.34
30 or older	1.44	0.93	1.10	0.34	0.51	0.36	1.06	1.22
Degree-granting institution (undergraduate)								
Public 4-year								
Nondoctorate-granting	1.21	0.62	0.75	0.22	0.43	0.50	0.88	0.97
Doctorate-granting	0.98	0.43	0.59	0.12	0.49	0.51	0.68	0.91
Private, not-for-profit 4-year								
Nondoctorate-granting	1.26	0.64	0.87	0.13	0.63	0.48	0.79	1.16
Doctorate-granting	1.66	1.16	0.92	0.27	0.67	1.23	1.58	1.44
Other	3.44	3.45	1.50	0.00	1.10	0.50	3.47	2.00

Table B1—Standard errors for compendium table 1.1: Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in April 1997, and percentages employed and enrolled, by selected student characteristics—Continued

	Not enrolled		Part-time enrolled		Full-time enrolled		Total	
	Employed	Not employed	Employed	Not employed	Employed	Not employed	Employed[1]	Enrolled[2]
Total undergraduate debt[3]								
Did not borrow	0.83	0.44	0.50	0.12	0.37	0.43	0.61	0.73
Borrowed	0.81	0.44	0.51	0.13	0.41	0.33	0.56	0.73
Less than $1,000	5.51	1.57	3.66	0.00	3.73	1.80	2.42	5.30
$1,000–4,999	1.56	0.81	1.04	0.22	0.73	0.71	1.05	1.43
$5,000–9,999	1.39	0.95	0.86	0.37	0.54	0.53	1.14	1.12
$10,000–19,999	1.32	0.70	0.84	0.08	0.77	0.46	0.85	1.18
$20,000 or more	2.91	1.64	2.02	0.76	1.28	0.91	1.96	2.55
Baccalaureate degree major								
Professional fields	0.75	0.42	0.50	0.08	0.31	0.30	0.53	0.63
Business and management	1.17	0.68	0.72	0.12	0.47	0.45	0.81	0.91
Education	1.38	0.79	1.15	0.19	0.62	0.48	0.92	1.29
Engineering	1.82	0.51	1.36	0.10	0.87	0.73	0.97	1.75
Health professions	2.09	1.49	1.00	0.16	0.89	0.96	1.74	1.64
Public affairs/social services	3.15	1.26	2.14	0.28	1.55	0.32	1.31	2.76
Arts and sciences	1.00	0.60	0.57	0.21	0.52	0.62	0.85	0.92
Biological sciences	2.78	1.28	1.31	0.44	1.74	2.43	2.60	2.86
Mathematics and other sciences	2.23	1.11	1.35	0.17	1.15	1.19	1.63	2.04
Social science	1.69	0.99	1.32	0.47	0.76	0.82	1.31	1.60
History	4.37	1.29	2.52	0.76	1.31	2.93	3.15	4.06
Humanities	1.84	1.39	0.99	0.54	1.04	0.63	1.51	1.58
Psychology	3.44	2.53	1.24	0.49	2.32	1.91	2.99	2.96
Other	1.29	0.74	0.96	0.19	0.66	0.36	0.84	1.20
Highest degree attained by 1997								
Bachelor's degree	0.62	0.34	0.40	0.10	0.28	0.31	0.56	0.46
Postbaccalaureate certificate	3.44	1.97	2.34	0.00	1.54	1.77	3.06	2.56
Master's degree	1.89	1.18	1.02	0.22	1.07	0.78	1.60	1.47
First-professional degree	4.28	3.31	0.61	0.00	2.51	3.78	4.18	4.12
Doctoral degree	—	—	—	—	—	—	—	—
Employment status in April 1997								
Full-time	0.48	(*)	0.43	(*)	0.24	(*)	0.00	0.48
Part-time	2.13	(*)	1.16	(*)	2.10	(*)	0.00	2.13
Unemployed	(*)	4.00	(*)	1.94	(*)	3.90	(*)	4.00
Out of the labor force	(*)	2.38	(*)	0.81	(*)	2.42	(*)	2.38

Table B1—Standard errors for compendium table I.1: Percentage distribution of 1992–93 bachelor's degree recipients according to employment and enrollment status in April 1997, and percentages employed and enrolled, by selected student characteristics—Continued

	Not enrolled		Part-time enrolled		Full-time enrolled		Total	
	Employed	Not employed	Employed	Not employed	Employed	Not employed	Employed[1]	Enrolled[2]
April 1997 occupation								
Business and management	1.01	(*)	0.91	(*)	0.47	(*)	0.00	1.01
School teacher	1.43	(*)	1.26	(*)	0.80	(*)	0.00	1.43
Engineering	1.94	(*)	1.65	(*)	1.08	(*)	0.00	1.94
Health professions	1.65	(*)	1.12	(*)	1.24	(*)	0.00	1.65
Other professions	1.28	(*)	0.94	(*)	0.97	(*)	0.00	1.28
Computer science, programming	1.92	(*)	1.85	(*)	0.59	(*)	0.00	1.92
Noncomputer technician	6.45	(*)	4.98	(*)	5.41	(*)	0.00	6.45
Administrative, clerical, support	1.20	(*)	0.83	(*)	0.82	(*)	0.00	1.20
Mechanic, operator, laborer	1.97	(*)	1.60	(*)	1.29	(*)	0.00	1.97
Sales	1.05	(*)	1.02	(*)	0.30	(*)	0.00	1.05
Service	3.12	(*)	1.60	(*)	2.84	(*)	0.00	3.12
Military, protective services	3.76	(*)	3.66	(*)	1.39	(*)	0.00	3.76
Other, uncodeable	3.94	(*)	2.51	(*)	3.11	(*)	0.00	3.94
Enrollment/employment status in April 1994								
Full-time enrolled, employed	2.26	1.29	1.71	0.21	1.42	1.20	1.70	2.12
Full-time enrolled, not employed	2.31	1.55	0.94	0.32	0.93	1.90	2.22	2.15
Part-time enrolled	2.54	1.05	2.19	0.31	1.09	1.20	1.58	2.46
Not enrolled, employed	0.62	0.32	0.39	0.09	0.30	0.28	0.44	0.56
Not enrolled, not employed	2.59	2.22	1.19	0.64	1.40	0.80	2.33	1.98

—Too few cases for a reliable estimate.

*Not applicable.

[1]Includes employed respondents who are also enrolled. Only those who were enrolled and/or employed were included in this table. Therefore, all those with an occupation other than student were employed. Therefore, the standard errors are 0.

[2]Includes enrolled respondents who are also employed.

[3]Federal loan programs only.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 Baccalaureate and Beyond Longitudinal Study, Second Follow-up (B&B:93/97), Data Analysis System.

Statistical Procedures

Two types of statistical procedures were used in this report: testing differences between means (or proportions) and testing for linear trends. Each procedure is described below.

Differences Between Means

Most descriptive comparisons in this report were tested using Student's *t* statistic. Statistical significance was determined by calculating *t* values for differences between pairs of means or

proportions and comparing these with published values of t for two-tailed hypothesis testing, using a 5 percent probability of a Type I error (a significance level of .05).[30]

Student's t values may be computed to test the difference between estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \qquad (1)$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. Note that this formula is valid only for independent estimates. When the estimates are not independent (for example, when comparing a total percentage with that for a subgroup that is included in the total), a covariance term must be added to the denominator of the t-test formula. When comparing the estimate for a total with that of a subgroup, the following formula was used:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 - 2p\ se_{sub}^2}} \qquad (2)$$

where p is the proportion of the total contained in the subgroup.

There are hazards in reporting statistical tests for each comparison. First, comparisons based on large t statistics may appear to merit special attention. This can be misleading since the magnitude of the t statistic is related not only to the observed differences in means or percentages but also to the number of students in the specific categories used for comparison. Hence, a small difference compared across a large number of students would produce a large t statistic.

A second hazard in reporting statistical tests for each comparison occurs when making multiple comparisons between categories of an independent variable. For example, when making paired comparisons between different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics or "families" are tested for statistical significance, one must apply a standard that assures a level of significance for all of those comparisons taken together.

Comparisons were made in this report only when $p \leq .05/k$ for a particular pairwise comparison, where that comparison was one of k tests within a family. This guarantees both that the

[30]A Type I error occurs when one erroneously concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn.

individual comparison would have $p \leq .05$ and that for k comparisons within a family of possible comparisons, the significance level for all the comparisons would sum to $p \leq .05$.[31]

For example, when comparing males and females, only one comparison is possible. In this family, $k=1$, and there is no need to adjust the significance level. When students are divided into five racial–ethnic groups and all possible comparisons are made, then $k=10$ and the significance level for each test within this family of comparisons must be $p \leq .05/10$, or $p \leq .005$. The formula for calculating family size (k) is as follows:

$$k = \frac{j(j-1)}{2} \tag{3}$$

where j is the number of categories for the variable being tested. For example, in the case of a variable with five categories such as race–ethnicity, one substitutes 5 for j in equation 3:

$$k = \frac{5(5-1)}{2} = 10$$

Different schools of thought exist on the application of the Bonferroni adjustment: while some would use an experiment-wise calculation of k, where all the dependent variables were considered simultaneously in selecting a critical value, here the calculation of k and the accompanying critical value were restricted to a single dependent variable at a time, since the Bonferroni adjustment is already a conservative strategy.

Linear Trends

Some comparisons across categories of an ordered variable with three or more levels involved a test for a linear trend across all categories, rather than a series of tests between pairs of categories. Two procedures were used to test the statistical significance of an apparent linear trend, depending upon whether the estimates being examined were proportions (such as percentages) or averages.

Linear trends in proportions. When proportions were examined relative to a variable with ordered categories, Student's t-test was applied to a measure of linear trend. The test involves estimating a simple linear regression with a variable representing the order of the categories as

[31] The standard that $p \leq .05/k$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the t statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Olive Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association* 56 (1961): 52–64.

the independent variable (e.g., SES), and the proportion of interest (e.g., the percentage who completed at least 30 credits) as the dependent variable. Before estimating the regression, the data must be adjusted by design effects to account for the complex sample design. The *t* statistic is calculated as the ratio of the regression coefficient to its standard error. If *t* is greater than 1.96 (the critical value of *t* at a significance level of .05), there is evidence of a linear relationship between the two variables.[32]

Linear trends in averages. When averages of a continuous variable were examined relative to a variable with ordered categories, Analysis of Variance (ANOVA) was used to test for a linear relationship between the two variables. To do this, ANOVA models included orthogonal linear contrasts corresponding to successive levels of the independent variable. The squares of the Taylorized standard errors (that is, standard errors that were calculated by the Taylor series method), the variance between the means, and the unweighted sample sizes were used to partition total sum of squares into within- and between-group sums of squares. These were used to create mean squares for the within- and between-group variance components and their corresponding F statistics, which were then compared with published values of F for a significance level of .05.[33] Significant values of both the overall F and the F associated with the linear contrast term were required as evidence of a linear relationship between the two variables. Means and Taylorized standard errors were calculated by the DAS. Unweighted sample sizes are not available from the DAS and were provided by NCES.

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[32]For more information about this modification of Student's *t*-test, see George W. Snedecor and William G. Cochran, *Statistical Methods* (Ames, IA: Iowa State University Press, 1967), 246–247. For more information about linear regression, see Michael Lewis-Beck, *Applied Regression: An Introduction*, vol. 22 (Beverly Hills, CA: Sage Publications, Inc., 1980).

[33]More information about ANOVA and significance testing using the F statistic can be found in any standard textbook on statistical methods in the social and behavioral sciences.

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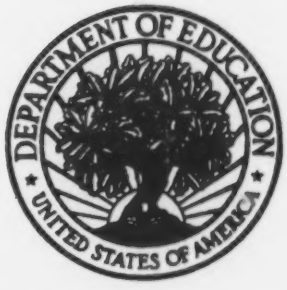
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